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August 4, 2006

TO: Basic and Advanced Life Support Provider Agencies
Base Hospital Nurse Coordinators
Base Hospital Medical Directors
EMT-Paramedic Training Program Coordinators

FROM: Bruce Haynes, M.D.
EMS Medical Director
Division of Emergency Medical Services

NEW / REVISED 2006 EMERGENCY MEDICAL SERVICES TREATMENT PROTOCOLS / POLICIES

For the past year, many committees have been working to update the policies and protocols contained within the County of San Diego Emergency Medical Services Policy and Procedure Manual. We are pleased once again to present the complete manual on CD ROM. Summaries of the ALS/BLS adult and pediatric treatment changes are included on the CD ROM. The table of contents reflects the documents that have been updated for July 1, 2006 implementation.

Please replace earlier copies of your EMS Policy Manual with the updated documents. Contact Merle Rupp at the EMS office for questions related to documents in the EMS System Policy Manual.

Thank you.

BRUCE HAYNES, M.D.
EMS Medical Director

BH:MM:bb
Enclosure

COUNTY OF SAN DIEGO
DIVISION OF EMERGENCY MEDICAL SERVICES
POLICIES AND PROCEDURES
Master List

Policy Designators:	
A	Air Medical
B	EMT-1
D	EMT-D
N	Non Emergency Medical Transport
P	EMT-Paramedic
S	System - applies to all components of EMS system
T	Trauma Care System
L	Automatic External Defibrillator

000 - SYSTEMS

S-001 Emergency Medical Services System Compliance with State Statutes and Regulations **(7/04)**
S-002 Approval of Emergency Medical Services System Standards, Policies and Procedures **(7/04)**
S-003 Program Record Keeping: Training and Certification **(1/05)**
S-004 Quality Assurance/Quality Improvement for the Prehospital Emergency Medical Services System **(1/05)**
S-005 EMS Medical Director's Advisory Committee (Base Station Physicians' Committee) **(7/03)**
S-006 Prehospital Audit Committee **(7/01)**
S-007 Transfer Agreements **(7/04)**
S-008 Interfacility Transfers - Levels of Care **(7/02)**
S-009 Guidelines for the Prevention of Infectious and Communicable Diseases **(7/02)**
S-010 Guidelines for Hospitals Requesting Ambulance Diversion **(7/02)**
S-011 Prehospital Emergency Medical Services Certificated Personnel Affected by Local EMS Disciplinary Action **(7/04)**
S-012 Prehospital Emergency Medical Care Investigative Process **(7/04)**
S-014 Guidelines for Verification of Organ Donor Status **(7/05)**
S-015 Medical Audit Committee on Trauma **(7/02)**
S-016 Release of Patient Information/Confidentiality **(7/04)**
S-017 Downgrade or Closure of Emergency Services in a Hospital Designated as a Basic Emergency Receiving Facility **(7/03)**
S-018 EMS for Children (EMSC) Advisory Committee **(7/02)**
S-019 Cardiac Advisory Committee **(8/06) new**
S-020 Designation of a Cardiovascular "STEMI" Receiving Center **(8/06) new**
S-021 De-Designation of a Cardiovascular "STEMI" Receiving Center **(8/06) new**

100 - TREATMENT GUIDELINES AND PROTOCOLS

SECTION I

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S-101 Glossary of Terms **(7/05)**
S-102 List of Abbreviations **(7/06)**

COUNTY OF SAN DIEGO
DIVISION OF EMERGENCY MEDICAL SERVICES
POLICIES AND PROCEDURES
Master List

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P-104	ALS Skills List **(7/06)**
S-105	Latex-Safe Equipment List **(7/05)**
D-108	Emergency Medical Technician Defibrillation Automated External Defibrillator (AED) and Esophageal Tracheal Airway Device (ETAD) Standing Orders **(7/05)**
D-109	Emergency Medical Technician/Public Safety-Defibrillation Automated External Defibrillator (AED) Standing Orders **(7/05)**
P-110	Adult ALS Standing Orders **(7/06)**
P-111	Adult Standing Orders for Communications Failure **(7/06)**
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P-114	Pediatric MICU Inventory **(7/05)**
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P-115 (a)	Pediatric Weight Based Dosage Standards **(7/05)**
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S-120	Abdominal Pain (Non-Traumatic) **(7/05)**
S-121	Airway Obstruction (Foreign Body) **(7/06)**
S-122	Allergic Reaction/Anaphylaxis **(7/05)**
S-123	Altered Neurologic Function (Non-Traumatic) **(7/06)**
S-124	Burns **(7/05)**
S-125	Cardiac Arrest Unmonitored (Non-Traumatic) **(Merged with S-127)**
S-126	Discomfort/Pain of Suspected Cardiac Origin **(7/06)**
S-127	Dysrhythmias **(7/06)**
S-129	Envenomation Injuries **(7/05)**
S-130	Environmental Exposure **(7/06)**
S-131	Hemodialysis Patient **(7/05)**
S-132	Near Drowning/Diving Related Incidents **(7/05)**
S-133	Obstetrical Emergencies **(7/05)**
S-134	Poisoning/Overdose **(7/05)**
S-135	Pre-Existing Medical Interventions **(7/05)**
S-136	Respiratory Distress **(7/05)**
S-137	Sexual Assault **(7/05)**
S-138	Shock **(7/05)**
S-139	Trauma **(7/05)**
S-140	Triage, Multiple Patient Incident **(7/05)**
S-141	Pain Management **(7/05)**
S-150	Nerve Agent Exposure **(7/05)**
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S-161	Altered Neurologic Function (Non-Traumatic) **(7/05)**
S-162	ALS/Allergic Reaction **(7/05)**
S-163	Dysrhythmias **(7/06)**
S-164	Envenomation Injuries **(7/05)**
S-165	Poisoning/Overdose **(7/05)**
S-166	Newborn Deliveries **(7/05)**
S-167	Respiratory Distress **(7/05)**
S-168	Shock (Non-Traumatic) **(7/05)**
S-169	Trauma **(7/05)**

S-170 Burns **(7/05)**
S-171 ALS - Cardiac Arrest (Unmonitored non-traumatic) **(Merged with S-163)**
S-172 Apparent Life Threatening Event **(7/05)**
S-173 Pain Management **(7/05)**

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A-204 Skills List **(7/03)**
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A-217 Pediatric Drug Chart **(7/03)**
A-220 Abdominal Pain (Non-Traumatic) **(7/03)**
A-221 Airway Obstruction (Foreign Body) **(7/03)**
A-222 Allergic Reaction/Anaphylaxis **(7/03)**
A-223 Altered Neurologic Function (Non-Traumatic) **(7/03)**
A-224 Burns **(7/03)**
A-225 Cardiac Arrest Unmonitored (Non-traumatic) **(7/03)**
A-226 Discomfort/Pain of Suspected Cardiac Origin **(7/03)**
A-227 Dysrhythmias **(7/03)**
A-229 Envenomation Injuries **(7/03)**
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A-233 Obstetrical Emergencies **(7/03)**
A-234 Poisoning/Overdose **(7/03)**
A-235 Pre-Existing Medical Interventions **(7/03)**
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A-241 Pain Management, Adult **(7/03)**
A-260 Airway Obstruction **(7/03)**
A-261 Altered Neurologic Function (Non-Traumatic) **(7/03)**
A-262 Pediatric ALS-Allergic Reaction **(7/03)**
A-263 Dysrhythmias **(7/03)**
A-264 Envenomation Injuries **(7/03)**
A-265 Poisoning/Overdose **(7/03)**
A-266 Newborn Deliveries **(7/03)**
A-267 Respiratory Distress **(7/03)**
A-268 Shock (non traumatic) **(7/03)**
A-269 Trauma **(7/03)**
A-270 Burns **(7/03)**
A-271 Cardiac Arrest Unmonitored (Non-Traumatic) **(7/03)**
A-273 Pain Management, Pediatric **(7/03)**

COUNTY OF SAN DIEGO
DIVISION OF EMERGENCY MEDICAL SERVICES
POLICIES AND PROCEDURES
Master List
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P-301	EMT-Paramedic Training Program Requirements and Procedures for Approval **(7/05)**
P-302	Guidelines for Placement of Paramedic Interns in San Diego County **(7/06) new**
P-303	Mobile Intensive Care Nurse Authorization/Reauthorization **(7/04)**
P-305	EMT-Paramedic Accreditation in San Diego County **(1/05)**
S-306	Designation of Authorized Providers of Continuing Education for Emergency Medical Services Personnel **(1/05)**
S-307	Continuing Education for Prehospital Personnel **(1/05)**
D-320	Defibrillation Training Program Student Eligibility (EMT/PS) **(7/05)**
D-321	Emergency Medical Technician/Pubic Safety-Defibrillation Training Program Requirements **(7/05)**
D-322	Emergency Medical Technician/Public Safety-Defibrillation Accreditation **(7/05)**
B-325	Esophageal Tracheal Airway Device Training Program Requirements **(7/05)**
B-326	Esophageal Tracheal Airway Device Student Eligibility **(7/05)**
B-327	Esophageal Tracheal airway Device (ETAD) Accreditation **(7/05)**
B-351	EMT Training Programs **(7/05)**
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400 - MEDICAL CONTROL

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S-402	Prehospital Determination of Death **(7/06)**
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P-408	Variation From San Diego County Protocols for Advance Life Support **(7/04)**
S-409	Reporting of Issues in Patient Care Management **(1/05)**
P-410	San Diego County Special Assignment - EMT-Paramedic **(7/05)**
S-411	Reporting of Suspected Abuse **(7/05)**
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S-414	Do Not Resuscitate - DNR **(7/06)**
S-415	Base Hospital Contact/Patient Transportation and Report **(7/01)**
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D-418	Emergency Medical Technician/Public Safety-Defibrillation Equipment **(7/05)**
D-420	Transfer of Specific Patient Care Information Between Emergency Medical Technician/Public Safety-Defibrillation and Transport Personnel **(7/03)**
S-422	Application of Patient Restraints **(7/02)**
S-440	Utilization of Nerve Agent Exposure Drugs **(7/05)**
B-450	Emergency Medical Technician-I Scope of Practice **(7/05)**
T-460	Identification of the Trauma Center Candidate **(7/01)**
T-460 (a)	Trauma Decision Tree Algorithm **(7/01)**
A-475	Air Medical Support Utilization **(7/04)**

COUNTY OF SAN DIEGO
DIVISION OF EMERGENCY MEDICAL SERVICES
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Master List

600 - DATA COLLECTION

S-601	Communication and Documentation of Prehospital Patient Care Information **(7/01)**
D-620	Emergency Medical Technician/Public Safety-Defibrillation Data Collection and Evaluation **(2/99)**
D-621	Transfer of Patient Data/Medical Record **(2/99)**
D-622	Esophageal Tracheal Airway Device Data Collection and Evaluation **(2/99)**

700 - BASE HOSPITAL/TRAUMA CENTER

P-701	EMT-Paramedic Base Hospital Designation **(7/05)**
P-702	Dedesignation of an EMT-Paramedic Base Hospital **(7/05)**
T-703	Trauma Care Fund **(7/02)**
T-705	Trauma Catchment Service Area **(7/02)**
T-706	Role of the Pediatric Trauma Center **(7/02)**
T-708	Trauma Care Coordination Within the Trauma System **(7/02)**
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T-718	Public Information & Education on Trauma Systems **(7/02)**
T-719	Trauma Provider Marketing and Advertising **(7/02)**
D-720	EMT/PS-D Base Hospital Designation **(7/05)**
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800 - SERVICE PROVIDER AGENCY

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S-803	Recovery of Prehospital Patient Care Reusable Equipment **(7/99)**
P-804	Alternate EMT-Paramedic Service Provider Application/Designation **(9/91)**
P-805	Advanced Life Support First Responder Units **(7/04)**
P-806	Advanced Life Support First Responder Inventory **(1/06)**
P-807	Wildland ALS Kit Inventory **(7/06)**
D-820	Emergency Medical Technician/Public Safety-Defibrillation Service Provider Designation **(7/05)**
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S-830	Ambulance Provider's Permit Application Process **(7/03)**
S-831	Permit Appeal Process **(6/93)**
B-833	BLS Ground Ambulance Vehicle Requirements **(7/03)**
S-835	Requirements for Ground Critical Care Transport Services **(7/02)**
S-836	Critical Care Transport Unit Inventory **(7/02)**
N-840	Non Emergency Transport Provider's Permit Application Process **(7/03)**
N-841	Non Emergency Medical Transport Service Requirements **(7/03)**
B-850	Basic Life Support Ambulance Service Provider Requirements **(7/04)**
A-875	Prehospital EMS Aircraft Classification **(7/04)**
A-876	Air Ambulance Dispatch Center Designation/Dispatch of Air Ambulance **(7/04)**
A-877	Air Ambulance Service Provider Authorization **(7/04)**

County of San Diego Health and Human Services
Emergency Medical Services

SUMMARY OF CHANGES TO PEDIATRIC ALS/BLS TREATMENT PROTOCOLS FOR JULY 1, 2006

	PEDIATRIC PROTOCOLS
S-160 **Airway** **Obstruction**	**BLS** **Airway Obstruction** Change protocol based on new AHA Guidelines: • If patient becomes unconscious OR is found unconscious: Begin CPR • Reverse order under NOTE: to read, "5 Back blows and chest thrusts for infants < 1 year. MR prn"
S-163 **Dysrhythmias**	**VF/Pulseless VT Protocol** Changed to: **UNWITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate per drug chart (monophasic/biphasic) x1 SO **WITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate per drug chart (monophasic/biphasic) x1 SO CPR x2" Perform10 second rhythm check, and pulse check if organized rhythm Repeat cycle as indicated by rhythm Once IV/IO is established after next rhythm/pulse check, if no pulse: Epinephrine 1:10,000 per drug chart IVP/IO MR x2 q3-5" SO. MR q3-5" BHO **If monitor available and still in VF/VT:** Lidocaine per drug chart IVP/IO SO. MR x2 q3- 5" SO Intubate SO Avoid interruption of CPR NG prn SO **If no IV/IO established:** Epinephrine 1:1000 per drug chart ET, MR x2 q3-5" SO. MR q3-5" BHO **OR** Epinephrine 1:1000 per drug chart (diluted to 20ml) ETAD-esophageal via port 1 (blue) MR x2 q5" SO. MR q5" BHO Lidocaine per drug chart ET SO. MR x2 q3- 5" SO

County of San Diego Health and Human Services
Emergency Medical Services

SUMMARY OF CHANGES TO SECTION II AND ADULT ALS/BLS TREATMENT PROTOCOLS FOR JULY 1, 2006

	SECTION II
S-100 Introduction & Glossary of Terms	Change: • Resources and References updated
S-102 List of Abbreviations	Add: • STEMI
P-103 BLS/ALS Ambulance Inventory	Change: • 12 Lead EKG from optional to required
P-104 ALS Skills Use	Add: • STEMI comments to 12 Lead EKG • Use extension tubing for suspected STEMI and *** Acute MI*** to Vascular Access - Extremity
P-110 Adult ALS SO	Change: • Respiratory distress with rales (?cardiac origin) **to**: if systolic BP ≥ 150: NTG 0.8mg SL MR x3 q3-5" • Defibrillation VT (pulseless)/VF **to** Start at maximum energy (360 J monophasic or clinically equivalent biphasic energy dose). Repeat prn Delete: • Lasix as SO
P-111 Adult Communication Failure	Changed to reflect changes in SO and BHO
P-115 ALS Medication List	Change: • Lasix to *BHPO*
	ADULT PROTOCOLS
S121 Airway Obstruction	Delete: • Abdominal thrusts from unconscious adult choking patient
S-123 Altered Neuro Function (Non-Traumatic)	**ALS** Add: **Suspected CVA/Stroke:** • Only use supplemental O_2 for O_2 saturation <92%
S-126 Discomfort/pain of suspected cardiac origin	**ALS:** Change: • "If available" to "Obtain 12 lead EKG
S-127 Dysrhythmias	Combine: Pulseless Electrical Activity (PEA) and Asystole protocols Change: **Unstable Bradycardia with Pulse:** • Atropine from 0.5 -1mg IVP for pulse <60 bpm **to** Atropine 0.5 mg IVP for pulse < 60 bpm SO MR q 3-5" to max of 3mg SO

S-127 **Dysrhythmias**	Change: • Atropine 1-2 mg ET for pulse <60 bpm SO. MR q3-5" to max of 6mg administered dose SO **to** Atropine 1-mg ET for pulse <60 bpm SO. MR q3-5" to max of 6mg administered dose SO **VF/Pulseless VT** Change to: Precordial thump for witnessed onset **UNWITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate at max setting x1 SO **WITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate at max setting x1 SO CPR x 2" Perform10 second rhythm check, and pulse check if organized rhythm Repeat cycle as indicated by rhythm Once IV is established after next rhythm/pulse check, if no pulse: Epinephrine 1:10,000 1mg IVP MR q3-5" SO **If monitor available and still in VF/VT:** Lidocaine 1.5mg/kg IVP. MR x1 in 3-5" SO Intubate SO Avoid interruption of CPR NG prn SO **If no IV established:** Epinephrine 1:1,000 2mg ET, MR q3-5"SO **OR** Epinephrine 1:1,000 10mg (dilute to 20ml) ETAD - esophageal placement via port 1 (blue) MR q5" SO Lidocaine 3mg/kg ET. MR x1 in 3-5" SO
S-130 **Environmental Exposure**	**ALS** Change: **Severe Hypothermia with Cardiac Arrest:** • If defibrillation needed, limit to 1 shock maximum
S-136 **Respiratory Distress**	**ALS** Change: **Respiratory Distress with Rales (?cardiac origin) to:** • **If systolic BP ≥ 100 but <150***:* NTG 0.4mg SL SO. MR q3-5" SO • **If systolic BP ≥ 150***:* NTG 0.8mg SL SO MR x3 q3-5" SO MR BHO • Lasix to *BHPO* • MS dose to max of 10mg SO Delete: • BHO for repeat MS

SUBJECT: EMERGENCY MEDICAL SERVICES SYSTEM COMPLIANCE WITH STATE STATUES AND REGULATIONS **Date: 07/01/04**

I. Authority: Health and Safety Code, Division 2.5, Section 1797.220.

II. Purpose: To assure compliance for the emergency medical services (EMS) system with applicable State Statutes and Regulations.

III. Policy: The County of San Diego's EMS system and all its components shall comply with all State of California Statutes and Regulations regarding emergency medical services.

Approved:

Administration **Medical Director**

SUBJECT: APPROVAL/IMPLEMENTATION OF EMERGENCY MEDICAL SERVICES SYSTEMS STANDARDS, POLICIES AND PROCEDURES **Date: 07/01/04**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.220 and 1798.

II. Purpose: To approve standards, policies, and procedures for the Emergency Medical Services (EMS) system.

III. Policy:

A. EMS system standards, policies, and procedures shall be approved by the County of San Diego EMS Medical Director, or the Director of the Health and Human Services Agency, or designee, after review and comment by the Emergency Medical Care Committee (EMCC).

B. All standards, policies, and procedures regarding medical control and medical accountability shall be approved by the County of San Diego EMS Medical Director, after review and comment by the EMS Medical Director's Advisory Committee (Base Station Physicians' Committee). This includes but is not limited to:

1. Treatment and triage protocols;
2. Prehospital patient report;
3. Patient care reporting requirements;
4. Field medical care protocols.

C. Providers shall be notified a minimum of forty-five (45) days prior to implementation of new or revised policies.

D. It is preferred that implementation of new or revised policies take place annually in July.

Approved:

Administration **Medical Director**

SUBJECT: PROGRAM RECORDKEEPING: TRAINING AND CERTIFICATION **Date: 01/01/2005**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.204 and 1797.208.

II. Purpose: To identify specific records to be maintained by the Emergency Medical Services Branch (EMS) regarding EMT-B certification, EMT-ETAD accreditation, PS-D accreditation, Paramedic accreditation, MICN authorization, AED authorization, and County approved continuing education (CE) providers and training programs.

III. Policy:

A. County of San Diego, Emergency Medical Services Branch (EMS) shall maintain on its premises for a minimum of five (5) years, the following records:

1. Approved EMS training program documentation including:
    a. Application form and accompanying materials.
    b. Copy of written approval from EMS.
2. A list of current EMS Training Program medical directors, course directors, clinical coordinators and principal instructors.
3. A list of all prehospital field personnel currently certified/accredited/authorized by the County of San Diego EMS Medical Director.
4. A list of all field prehospital field personnel whose certificates have been suspended or revoked.
5. A list of approved CE providers, including approval dates.

B. EMS shall submit annually, in January, to the State Emergency Medical Services Authority, the following:

1. The names, addresses, and course directors of each approved EMS Training Program.
2. The number of currently certified EMT-Bs**,** EMT-ETAD's, accredited Paramedics,

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Approved:

Administration **EMS Medical Director**

PS-D's and authorized MICNs in San Diego County.

C. The State Emergency Medical Services Authority shall be notified in writing of any changes in the list of approved training programs as they occur.

D. The State EMS Authority and the applicable EMT-B certifying authority shall be notified in writing of all reportable actions taken regarding a certificate holder's certificate, according to regulation.

Approved:

Administration **EMS Medical Director**

I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.204, 1797.220, 1798, 1798.100 and 1798.102.

II. **Purpose:** To identify primary responsibilities of all participants in the County of San Diego's EMS system for achievement of optimal quality of prehospital care for patients who access the system.

III. **Definition(s):**

Emergency Medical Services System Quality Improvement Program (EMS QI)

Methods of evaluation that are composed of structure, process, and outcome evaluations that focus on improvement efforts to:

1. Identify root causes of problems
2. Intervene to reduce or eliminate these causes
3. Take steps to correct the problems.
4. Recognize excellence in performance and delivery of care.

IV. **Policy:**

A. The Health and Human Services Agency, Division of Emergency Medical Services (EMS) shall:

1. Develop and implement, in cooperation with other EMS system participants, a system-wide, written EMS QI plan.

2. Review the system EMS QI program annually for appropriateness to the system and revise as needed.

3. Develop, in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI program identifies a need for improvement.

4. Provide the EMS Authority with an annual update of QI program activities.

B. EMS Service Providers shall:

1. Develop and implement, in cooperation with other EMS System participants, a provider-specific, written EMS QI plan.

2. Review the provider specific EMS QI program annually for appropriateness to the operation of the of the EMS provider and revise as needed.

3. Participate in the local EMS agency's EMS QI Program that includes making available mutually agreed upon, relevant records for program monitoring and evaluation.

4. Develop in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI Program identifies a need for improvement.

C. Paramedic Base Hospitals shall

1. Develop and implement, in cooperation with other EMS System participants, a hospital-specific, written EMS QI program.

2. Review the provider specific EMS QI program annually for appropriateness to the operation of the of the base hospital and revise as needed.

Approved:

Administration **EMS Medical Director**

3. Participate in the local EMS agency's EMS QI Program that includes making available mutually agreed upon, relevant records for program monitoring and evaluation.

4. Develop in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI Program identifies a need for improvement.

D. Agreements:

1. The County of San Diego, Division of EMS shall maintain agreements with Base Hospitals and EMS service providers requiring, but not limited to,

   a. compliance with all the provisions listed in the California Code of Regulations, Title XXII, Division 9
   b. compliance with all County of San Diego, Division of EMS system policies, procedures and protocols.
   c. Reporting of significant issues in medical management to the EMS Medical Director.

      1. Incidents in which medications or treatments are provided which are outside approved treatment protocols, shall be reported to the EMS QI Program through the Base Hospitals or Provider Agencies in a timely manner. These incidents will also be reported at the Prehospital Audit Committee.

      2. Actions outside of the scope of prehospital personnel and actions or errors resulting in untoward patient effects, such as errors in the administration of medications, invasive procedures, defibrillation/cardioversion, or other patient treatments, shall be reported to the EMS Medical Director, within 48 hours.

2. These agreements shall provide the authority for the EMS Division to:

   a. Perform announced and unannounced site surveys of Base Hospitals and EMS provider agencies.

   b. Review patient care records necessary to investigate medical QI issues

3. Additionally the Division of EMS shall:

   a. Support regional QI committees (not limited to Prehospital Audit Committee, Medical Audit Committee).

   b. Attend Base Hospital/Agency Meetings.

   c. Periodically monitor prehospital continuing education offerings

   d. Perform random audits of prehospital patient records.

   e. Develop and implement internal mechanisms to monitor, identify, report and correct, quality issues.

4. Reporting of significant issues in medical management to the EMS Medical Director:

   a. Incidents in which medications or treatments are provided which are outside approved treatment protocols shall be reported to the regional QIP system shall be reported by the Base hospital or Agency personnel in a timely manner, through the Prehospital Audit Committee.

   b. Actions that are outside of the scope of practice of prehospital personnel, and actions or errors resulting in actual or potential untoward patient outcomes, shall be reported to the EMS Medical Director within 48 hours.

Approved:

Administration **EMS Medical Director**

SUBJECT: QUALITY ASSURANCE/QUALITY IMPROVEMENT FOR THE PREHOSPITAL EMERGENCY MEDICAL SERVICES SYSTEM **Date: 07/01/02**

QUALITY IMPROVEMENT GUIDELINES FOR EMS SYSTEM PARTICIPANTS IN SAN DIEGO COUNTY

I. Purpose: The purpose of this guideline is to define, for all EMS system participants, the general responsibilities of EMS system participants in implementing an effective systemwide continuous quality improvement plan for San Diego County.

II. Definitions:

A. Continuous Quality Improvement (CQI) – an ongoing method of evaluating medical services provided by EMS system participants, which includes defining standards, evaluating services against those standards, and utilizing the results of this evaluation for improving patient care. Such methods may include, but are not limited to, a written plan describing the program objectives, organizational structure as it relates to quality of care, and the scope and mechanism for overseeing the effectiveness of the program.

B. Standards of Care – The services that the local community expects will be provided to patients. These include therapeutic services (treatment protocols), health care professionalism (patient respect, confidentiality), and safety.

C. Patient Care Team – The group of individuals who provide care or service to an EMS patient, including law enforcement, first responders, EMT-I's, EMT-P's, MICN's, transport RN's, physicians and others.

D. Prehospital Personnel – All personnel participating in the delivery of prehospital patient care. This includes dispatchers, EMT-I's, EMT-P's, MICN's, transport RN's, and Base Hospital Physicians.

III. Guideline:

A. Mission of the San Diego County Prehospital Continuous Quality Improvement (CQI) Program: To provide a mechanism by which the prehospital medical services offered in San Diego County are continuously reviewed, evaluated, and revised as necessary such that the highest standards of medical care are maintained.

B. Roles of EMS System Participants

1. EMS Agency - *Mission Statements*:

To facilitate a systemwide QI program to monitor, review, evaluate and improve the quality of prehospital care in San Diego County. This will be accomplished through activities which involve all system participants in the prospective, concurrent, and retrospective review of that system, with continuous feedback to the system.

To facilitate educational activities that ensure that the basic training and continuing education programs remain of highest quality, responsive to the needs identified through the CQI process.

To coordinate/facilitate system research activities.

2. Service Provider Agency

Mission: To provide the staff, tools and work environment necessary to facilitate the provision of quality prehospital care, including a proactive role in supporting medical quality improvement, client satisfaction, and improved patient outcome.

a. Prospective QI:

1. To develop or adopt patient care standards, in collaboration with other system participants, designed to enhance the delivery of patient care.
2. To ensure that employees are oriented to and comply with the San Diego County EMS system QI program.
3. To ensure that field personnel receive updated training in the San Diego County EMS Scope of Practice, treatment protocols, and policies.
4. To establish an in-house QI process for operational activities.
5. To work with medical control personnel (EMS medical director, base hospital staff, etc.) to implement a medical QI program that interfaces with the regional QA/QI system.
6. To regularly review and revise in-house policies as necessary.
7. To actively participate in the review and revisions of EMS agency policies as needed.

b. Concurrent QI

1. To provide for ongoing evaluation of field personnel performance.
2. To monitor field/medical control communications.
3. To ensure availability of continuing education and skills improvement opportunities.
4. To communicate to EMS agency relevant performance variations. (P-409).

c. Retrospective QI

1. To review patient care records for compliance with agency policy, medical protocols, standards of care, and identified quality issues.
2. To recognize, reward, and encourage the positive provision of prehospital care.
3. To intervene with field personnel whose performance does not meet performance expectations. This may include referral of some issues for further action by the EMS agency.
4. To audit critical skills and situations (non-transports, pediatric patients, ALS skills, etc.) to ensure continued provision of quality care, and to provide remedial training as necessary.
5. To assist, where possible, the EMS system in its efforts to undertake research studies and focused audit activities.
6. To encourage field personnel to follow-up on the outcome and results of their patient interventions.

3. Prehospital Field Personnel

Mission: To work within the EMS CQI process to ensure that care provided is of the highest quality achievable, and to support, as professionals, the continued enhancement of prehospital care within the communities served.

a. Prospective QI

1. To maintain awareness of the "Standards of Care" in the prehospital setting.
2. To assume responsibility for professional growth and development.

3. To continually evaluate standards of care to identify opportunities for optimization.
4. To continually analyze personal performance in providing patient care services with the intent to identify areas of diminished skill, and initiate self-education activities to remediate.
5. To become aware and involved in the provider agency's QI process, as well as the San Diego County systemwide QI process.
6. To support the clinical education of new professionals through internship, mentorship, and critical discussion.

b. Concurrent

1. To, at the time of service, continuously evaluate the quality of care provided to each patient, every time, and to recognize changes in patient status and revise the plan of care accordingly.
2. To be a patient advocate; always consider "what is best for this patient."
3. To provide excellence, without discrimination, in the care of each patient.
4. To respect the knowledge, roles, and responsibilities of all other patient care team members.
5. To communicate professionally, i.e. to provide documentation and other communication to all members of the patient care team.

c. Retrospective

1. To recognize areas for improvement in the Standards of Care, and work to revise them accordingly.

Approved:

Administration **EMS Medical Director**

2. To participate actively in the retrospective review/audit of patient care activities.

3. To provide feedback to appropriate participants of the EMS system.

Base Hospital

Mission: Working with the community, EMS provider agencies, members of the EMS community, and the local EMS agency, to continuously promote excellence in the quality of prehospital care through medical quality improvement activities, on-line medical control, and community education.

a. Prospective

1. To participate in the development of patient care standards.

2. To ensure that all base hospital agency personnel receive adequate orientation to clinical and operational expectations of the role.

3. To provide medical leadership, assisting the EMS Medical Director and provider agencies in formulating or revising Standards of Care.

4. To recognize areas of potential professional or clinical growth in other team members, and provide educational opportunities for these professionals to learn.

5. To implement a QA/QI process that is collaborative, fair, non-punitive, consistent and provides feedback to the EMS system.

b. Concurrent

1. To assume responsibility for providing on-line medical direction for field personnel that is of highest quality and in the best interests of the patient.

2. To communicate professionally; provide documentation and other communication to all members of the patient care team.

c. Retrospective

1. To analyze system performance to identify opportunities for research.
2. To communicate professionally; provide documentation and other communication to all members of the patient care team in a timely manner. This includes collaboration with the CQI activities of the San Diego County Trauma System.
3. To analyze patient care documentation, identifying services provided in variance with the Standards of Care.
4. To review patient care records for compliance with agency policy, medical protocols, Standards of Care, and identified quality issues.
5. To recognize, reward, and encourage the positive provision of prehospital care.
6. To review with prehospital personnel any performance which may not meet standards of care expectations. This may include referral of some issues for further action. If further action is required, notification will be made to the appropriate agency personnel.
7. To monitor compliance with medication administration and skills procedures, and compliance with local policies to assure continued provision of quality care, and to facilitate remedial training as necessary.
8. To assist the EMS system in its efforts to undertake research studies or focused audit activities.
9. To provide timely feedback to relevant EMS system participants regarding the agency's QI findings and activities.
10. To encourage field personnel to follow-up on the outcome and results of their patient interventions.
11. To facilitate and coordinate the collection of data for EMS system research.

5. Receiving Hospitals (non-base)

Mission: To support the improvement of quality prehospital care through communication, participation

and proactivity in the regional CQI process.

a. Prospective

1. To remain knowledgeable of the San Diego County EMS system, including an awareness of system policies, QI process, and patient care team expectations.
2. To provide educational opportunities for field personnel that are relevant to patient care issues identified by receiving hospital, or ensure such needs are communicated to the base hospital or EMS agency.

b. Concurrent

1. To provide information to the EMS system regarding the individual facility's special resources such that patients requiring such services may be directed to the most appropriate facility.
2. To maintain ongoing dialogue with the EMS agency, Base Hospital, Field Provider agency, and prehospital personnel to identify areas for possible system improvement and increased quality of patient care.

c. Retrospective

1. To facilitate providing data and information to support system research activities and quality improvement activities.

6. Approved Training Agency or Continuing Education Provider

Mission: To take a proactive approach in their training of EMS personnel to meet the changing needs of EMS. This training will provide the student with the tools necessary to successfully work within the local and state EMS system to provide care that is safe, and consistent, and to work to improve prehospital care.

a. Prospective

1. To participate in the development of patient care standards.
2. To work with provider agencies and base hospitals to ensure quality training on new and

changing policies, protocols and equipment.

3. To work with base hospitals to provide quality training for EMS personnel, appropriate to their needs.
4. To continuously re-evaluate training and make changes as needed to improve teaching techniques in all training programs.
5. To remain current with changes in both education and EMS.
6. To be an active part of education at the county and state level through participation on committees and by keeping current with regulatory changes.

b. Concurrent

1. Communicate with all members of the EMS community to remain aware of their changing educational needs.

c. Retrospective

1. To evaluate students through traditional methods of testing, both written and skills.
2. To provide timely feedback to the students on their progress.
3. To evaluate students as they progress through the hospital and field areas by good communication with participating agencies.
4. To assist the EMS QI system in its efforts to undertake research studies or focused audit activities.
5. To allow open lines of communication with agencies and hospitals to be aware of strengths and weaknesses of graduating students.

SUBJECT: EMS MEDICAL DIRECTOR'S ADVISORY COMMITTEE **Date: 07/01/03**
(Base Station Physicians' Committee)

I. Authority: Health and Safety Code, Division 2.5, Section 1798.

II. Purpose: To designate an advisory committee to provide consultation, medical protocol review, and recommendations regarding prehospital medical care issues to the Medical Director of the San Diego County Emergency Medical Services (EMS) agency.

III. Policy: The San Diego County EMS Medical Director may consult with the San Diego County EMS Medical Director's Advisory Committee on issues concerning prehospital treatment protocols and prehospital medical care delivery in the EMS system.

A. **Membership:** The San Diego County EMS Medical Director's Advisory Committee of the County of San Diego, Division of EMS will have the following members:

a. All Base Hospital Medical Directors

b. One member representing Children's Hospital Emergency Department physician staff

c. One member representing approved paramedic training programs

d. One member representing County Paramedic Agencies Committee (CPAC)

e. One member representing the Base Hospital Nurse Coordinators Committee

f. One member representing the San Diego County Paramedics' Association

g. All prehospital agency physician Medical Directors

h. San Diego County EMS Medical Director or designee

i. EMS Prehospital Coordinator

B. The responsibilities of the San Diego County EMS Medical Director's Advisory Committee are:

1. To meet as an Advisory Committee on a monthly basis.

2. To develop an agenda in conjunction with the San Diego County EMS Medical Director.

3. To consult on prehospital medical issues.

Approved:

Steven Jones

Administration

EMS Medical Director

4. To convene small task forces of Advisory Committee members and others to work with the San Diego County EMS Medical Director or designee on specific medical management issues.
5. To consult with other medical specialties, or other advisory bodies in the County, as necessary.
6. To evaluate written statement(s) from Base Hospital Medical Director(s) questioning the medical effect of an EMS policy.

Approved:

Administration **EMS Medical Director**

SUBJECT: PREHOSPITAL AUDIT COMMITTEE **Date: 7/1/01**

I. Authority: Division 2.5, Health and Safety Code, Sections 1797.204 and 1798; also Evidence Code, Sections 1040 and 1157.7.

II. Purpose:

1. To establish an advisory committee to the local Emergency Medical Services (EMS) Agency to monitor, evaluate and report on the quality of prehospital medical care.
2. To promote Countywide standardization of the quality improvement process with emphasis on the educational aspect.
3. To review issues and matters of a system wide nature. It shall not be the function of this committee to become directly involved in the disciplinary action of any specific individual. The authority for actual disciplinary action rests with the County EMS Medical Director and/or the State EMS Authority in accordance with Health and Safety Code, Division 2.5, Section 1798.200.

III. Policy:

A. Scope of Review:

The scope of review to be conducted by the committee may include any patient encountered in the prehospital system in the County of San Diego. The review will include, but not be limited to:

1. Issues reported to the County (refer to P-409 of San Diego County Division of Emergency Medical Services Policy/Procedure/Protocol).
2. Variations from Protocols.
3. Deviations from Scope of Practice.
4. Medication errors.
5. Intubation complications.
6. Variations from standards of care.
7. Unusual cases or cases with education potential.

Approved:

Steven Jones
Administration

M.D. [illegible]
EMS Medical Director

B. Membership:

Members will be designated according to the following format and changes in elected/appointed members will take place at the end of the odd calendar year.

1. The Base Hospital Medical Director of each of the County's Base Hospitals.
2. The Base Hospital Nurse Coordinator of each of the County's Base Hospitals.
3. The Medical Director of the Emergency Department at Children's Hospital and Health Center.
4. The prehospital nurse liaison of the Emergency Department at Children=s Hospital and Health Center.
5. The Medical Director of each of the County's approved advanced life support (ALS) agencies.
6. One medical EMS liaison military representative.
7. The Program Director of each of the County's approved EMT-Paramedic training programs.
8. One current paramedic provider agency representative appointed by CPAC.
9. One City of San Diego ALS transporting agency representative.
10. Two paramedics (one public and one private provider) appointed by San Diego County Paramedic Association.
11. One EMT-I.
12. One first responder representative.
13. One emergency medicine resident from each training program (non-voting).
14. County staff.
15. One Trauma Hospital Medical Director representing the Medical Audit Committee (MAC) on Trauma.

C. Attendance:

1. Members will notify the Chairperson of the committee in advance of any scheduled meeting they will be unable to attend.
2. Resignation from the committee may be submitted, in writing, to the EMS Medical Director, and is effective

upon receipt, unless otherwise specified.

3. At the discretion of the PAC Chairperson and/or County EMS, other invitees may participate in the medical audit review of cases where their expertise is essential to make appropriate determinations. These invitees may include, but are not limited to the following:

   - paramedic agencies representatives
   - law enforcement
   - EMT provider
   - paramedics
   - MICN's
   - physicians
   - communication/dispatch representatives

D. Election of Officers:

Committee officers shall consist of two co-chairpersons one of which is a physician. Elections will take place during the last meeting of each calendar year and appointees shall assume office at the first meeting of the new calendar year. Officers elected shall serve a one year term, and may be re-elected.

E. Voting:

Due to the "advisory" nature of the committee, many issues will require input rather than a vote process. Vote process issues will be identified as such by the Chairperson. When voting is required, a "simple" majority of the voting members of the committee need to be present to constitute a quorum.

F. Meetings:

The committee shall meet on a monthly basis or at a frequency as determined to be appropriate by the Chairperson, but never less frequently than bimonthly.

Approved:

Administration **EMS Medical Director**

G. Minutes:

Minutes will be kept by the EMS Secretary or designee and distributed to the members at each meeting. Due to the confidentiality of the committee, documents will be collected by the EMS staff at the close of each meeting and no copies may be made or processed by members of the committee.

H. Confidentiality:

1. All proceedings, documents and discussions of the Prehospital Audit Committee are confidential and are covered under Sections 1040, 1157.5 and 1157.7 of the Evidence Code of the State of California. The prohibition relating to the discovery of testimony provided to the committee shall be applicable to all proceedings and records of this committee, which is one established by a local government agency as a professional standards review organization which is organized in a manner which makes available professional competence to monitor, evaluate and report on the necessity, quality and level of specialty health services, including but not limited to prehospital care services. Guests may be invited to discuss specific cases and issues in order to assist the committee in making final case or issue determinations. Guests may only be present for the portions of the meeting about which they have been requested to review or testify.

2. All members shall sign a confidentiality agreement not to divulge or discuss information that would have been obtained solely through Prehospital Audit Committee membership. Prior to the invited guests participating in the meeting, the Chairperson is responsible for explaining, and obtaining, a signed confidentiality agreement for invited guest(s).

Approved:

Steven Jones
Administration

M. L. Adams
EMS Medical Director

SUBJECT: TRANSFER AGREEMENTS **Date: 07/01/04**

I. **Authority**: California Health & Safety Code Section 1798.172.

II. **Purpose:** To ensure that all patients requesting emergency services from hospitals in San Diego County receive such evaluation and care as may be required. Furthermore, that all interfacility transfers of patients are accomplished with due consideration for the patients' health and safety.

III. **Policy:**

A. All acute care hospitals in San Diego County with basic or comprehensive emergency departments shall comply with all applicable statutes and regulations regarding the medical screening, examination, evaluation, and transfer of patients that present to that hospital's emergency department.

B. All acute care hospitals shall comply with all applicable statutes and regulations regarding implementation of agreements to ensure that patients with an emergency medical condition who present at that facility, and that facility is unable to accommodate that patient's specific condition, are transferred to a facility with capabilities specific to that patient's need.

1. Hospitals shall develop the mechanisms or agreements necessary to ensure that patients requiring specialty services are appropriately transferred when that hospital is unable to provide that specialty service.
2. Hospitals shall ensure the appropriateness and safety of patients during transfers by implementing policies and protocols which address the following:

a. Type of patient.

b. Initial patient care treatment.

c. Requirements and standards for interhospital care.

d. Logistics for transfer, evaluation, and monitoring the patient.

Approved:

Administration **Medical Director**

SUBJECT: INTERFACILITY TRANSFERS LEVEL OF CARE **Date: 07/01/02**

I. Authority: California Health & Safety Code 1798.172.

II. Purpose: To provide guidelines for ambulance transport of patients between acute care hospitals.

III. Policy:

A. A patient whose emergency medical condition has not been stabilized should not be transferred from a hospital which is capable of providing the required care.

B. Unstable patients shall be transferred only when the reason for the transfer is to medically facilitate the patient's care. The transport of unstable patients must have the concurrence of both the transferring and receiving physicians that the transfer is appropriate.

C. It is the responsibility of the transferring physician, in consultation with the receiving physician, to determine the appropriate mode of transportation and the appropriate medical personnel (EMT-I, EMT-P, RN, Physician, etc.) to provide care during transport.

D. Medical personnel providing interfacility transport shall have the capabilities and skills reasonably necessary to provide for the specific needs of the patient during the transport.

E. Prehospital personnel involved in the interfacility transportation of patients shall adhere to pertinent County and State policies, procedures and protocols pertaining to the scope of practice of prehospital personnel.

F. Hospitals with basic or comprehensive emergency departments shall comply with all applicable statutes and regulations regarding the medical screening examination, evaluation, and transfer of patients that present to that hospital's emergency department.

G. The levels of ambulance services available for the interfacility transport of patients include:

1. Basic Life Support Ambulance

a. The ambulance is staffed with at least two Emergency Medical Technician-I's.

Approved:

Steven Jones
Administration

M.D. [illegible]
EMS Medical Director

b. The patient is anticipated to require no more than basic life support skills during the transport.

c. Patient care may not exceed the EMT-I Scope of Practice.

d. The patient must be considered "stable" prior to the transport.

e. If the patient's condition deteriorates during the transport, the ambulance shall immediately proceed to the closest facility with a licensed emergency department.

2. Critical Care Transport - (including air medical ambulances)

a. The ambulance is staffed with clinical personnel (R.N., Respiratory Therapist, Physician, etc.) appropriate to the requirements of the patient as determined by the transferring physician in consultation with the receiving physician.

b. Unstable patients and those requiring clinical skills beyond those of EMT-I's shall be transported via critical care transport.

c. When nursing personnel are utilized during the transport, written orders from the transferring physician or other responsible physician covering medical and nursing activities shall accompany the patient.

3. EMT-Paramedic Ambulance

a. EMT-Paramedic/9-1-1 system personnel may be used to transport patients ONLY as a last resort when alternative forms of transportation are unavailable, or when the delay in obtaining alternative transport would pose an imminent threat to the patient's health and safety.

b. Hospital personnel accessing the emergency medical services (EMS) system for such transports shall note that, by accessing the EMS system, they may seriously deplete the

EMS resources of their local community.

c. In such situations, EMT-Paramedic/9-1-1 system personnel shall be given as thorough and complete a patient report as is possible by sending hospital staff, and will transport the patient IMMEDIATELY.

d. Paramedics/9-1-1 system personnel should NOT wait at the sending hospital for the completion of medical procedures or the copying of medical records, x-rays, etc. In general, they will not be expected to wait longer than 10 minutes while a patient is being prepared for transport by the sending facility. After 10 minutes, they may notify their dispatcher and may return to service.

e. Interfacility transfers utilizing EMT-Paramedic personnel shall remain under Base Hospital (not sending hospital) medical direction and control. EMT-Paramedics will operate within their scope of practice and in accordance with all other County policies and procedures during interfacility transfers.

f. The Prehospital Audit Committee (PAC) will review significant events and/or trends when EMT-Paramedic/9-1-1 system personnel have been utilized for interfacility transfers to ensure that 9-1-1 system personnel are being utilized appropriately. Issues identified by PAC will be referred to the EMS Division for further action.

Approved:

Steven Jones
Administration

M.L. McCormick
EMS Medical Director

SUBJECT: GUIDELINES FOR THE PREVENTION OF INFECTIOUS AND COMMUNICABLE DISEASES **Date: 07/01/02**

I. Authority: California Health & Safety Code Chapter 3, Article 5, Section 1797.186, 1797.188 and 1797.189.

II. Purpose: To reduce the risk of exposure to infectious and communicable diseases to prehospital personnel and to patients.

III. Policy:

A. All prehospital agencies (including first responder agencies, EMT-1 provider agencies, EMT-P provider agencies, EMT-1 and EMT-P training agencies, Base Hospitals, and aeromedical providers) shall develop and implement comprehensive policies and procedures that are in compliance with the guidelines and requirements outlined by the Centers for Disease Control and the California Occupational Safety & Health Administration regarding "universal precautions" and the protection of personnel and patients from exposure to blood borne and other infectious diseases.

B. Prehospital provider agencies shall develop and implement policies regarding the prompt reporting and follow-up of accidental exposures to infectious diseases by appropriate medical personnel.

Approved:

Administration **EMS Medical Director**

SUBJECT: GUIDELINES FOR HOSPITALS REQUESTING AMBULANCE DIVERSION **Date: 07/01/02**

I. **Authority:** California Health and Safety Code, Division 2.5, Section 1797.222 and California Code of Regulations, Title 13, Section 1105c: "In the absence of decisive factors to the contrary, ambulance drivers shall transport emergency patients to the most accessible emergency facility equipped, staffed, and prepared to administer care appropriate to the needs of the patient."

II. **Purpose:**

A. To transport emergency patients to the most accessible medical facility which is staffed, equipped, and prepared to administer emergency care appropriate to the needs and requests of the patient.

B. To provide a mechanism for a receiving hospital to request diversion of patients from its emergency department when it has been determined that the hospital is not staffed, equipped, and/or prepared to care for additional patients.

III. **Policy:**

A. Diversion Categories

It shall be the responsibility of the satellite hospitals to keep their Base Hospital(s) informed of their status. Satellite hospitals may request diversion, however, the final destination decision shall be made by the Base Hospital MICN/BHMD after consideration of all pertinent factors (i.e. status of area hospitals, ETA's, patient acuity and condition). A hospital may request diversion for the following reasons:

1. **Emergency Department Saturation** – Hospital's emergency department resources are fully committed and are not available for additional incoming ambulance patients.

2. **Neuro/CT Scan Unavailability** - Hospital is unable to provide appropriate care due to non-functioning CT-Scan and/or unavailability of a neurosurgeon. (Only for patients exhibiting possible neurological problems.)

Approved:

Administration **EMS Medical Director**

3. **Internal Disaster** – Hospital cannot receive any patients because of a physical plant breakdown (e.g. fire, bomb threat, power outage, etc.)

B. In the event of anticipated prolonged diversion, notification shall be made to the County of San Diego, Division of Emergency Medical Services.

C. Units dispatched as BLS and/or downgraded to BLS will contact the anticipated patient destination. If that destination is unable to accept patients due to diversion status, the transporting crew will contact the a Base Hospital to determine destination and to relay patient information.

D. Base Hospital direction of Mobile Intensive Care Units (MICU's).

1. Base Hospitals will attempt to honor diversion requests provided that:

   a. The involved MICU estimates that it can reach an "alternate" facility within a reasonable time.

   b. Patients are not perceived as exhibiting uncontrollable life threatening problems in the field (e.g. unmanageable airway, uncontrolled non-traumatic hemorrhage, or non-traumatic full arrest) or any other condition that warrants immediate physician intervention. (Patients meeting trauma criteria shall be transported according to Trauma Policies Protocols and Policy (See S-139 B, S-169, T460**)**.

2. If all area receiving hospitals are "requesting diversions" due to emergency department saturation, the "diversion request~~s~~" status may not be honored and the patient will be transported to the most accessible emergency medical facility within that area. Reasonable consideration should be given to limit transport time to no greater than 20 minutes.

Approved:

Administration **EMS Medical Director**

3. MICN's and prehospital personnel will make best efforts to ensure ambulance patients will be transported to their (patient/family) requested facility.

4. Any exceptions from this policy will be made by Base Hospital Physician Order only.

E. Health and Human Services Agency, Division of Emergency Medical Services staff and/or designee may monitor and/or perform unannounced site visits to hospitals to ensure compliance with these guidelines.

F. Issues of noncompliance should be reported to the Division of Emergency Medical Services.

Approved:

Administration **EMS Medical Director**

SUBJECT: PREHOSPITAL EMERGENCY MEDICAL CARE SERVICES CERTIFICATED PERSONNEL AFFECTED BY LOCAL EMS DISCIPLINARY ACTION

I. Authority: Health and Safety Code, Division 2.5, Section 1798.200 and 1798.204.

II. Purpose: To identify the prehospital Emergency Medical Services Personnel certified under provisions of Division 2.5 who are subject to local EMS Disciplinary Actions, and the grounds for such action.

III. Policy:

A. The classification of prehospital emergency medical services personnel certified under provisions of the California Code of Regulations, Title 22, Division 9, Chapter 6 include:

1. Emergency Medical Technician-Basic (EMT-B).
2. Emergency Medical Technician-II (EMT-II).
3. Emergency Medical Technician–Paramedic.

B. Negative certification actions taken under the above provisions are limited to consideration of the prehospital emergency care certificate(s) held, or applied for, pursuant to Division 2.5 of the Health and Safety Code and do not apply to any other license or certification which is not subject to the provisions of Division 2.5.

C. If the disciplinary action is taken against the prehospital care certificate of a person who holds a related certificate or license, the agency, which issued that other certificate or license, should be notified in writing of the disciplinary action taken and the reasons for that action.

D. The EMS Medical Director for the County of San Diego may take appropriate action according to these policies and procedures, against the certificate of any prehospital emergency care person certified pursuant to Division 2.5 of the Health and Safety Code, for which any of the following conditions is true:

1. The certificate was issued by the EMS Medical Director; or
2. The certificate holder utilizes or has utilized the certificate or the skills authorized by the certificate within the County of San Diego.

Approved:

Administration **Medical Director**

E. If the EMS Medical Director initiates an investigation of, or takes action which affects a prehospital emergency medical care certificate, which either was issued by another certifying authority or was issued to a certificate holder who utilized the prehospital skills authorized by the certificate within the jurisdiction of another local EMS Agency, the certifying authority and/or the other local EMS Agency shall be notified in writing of the initiation of the investigation, the findings of the investigation, and any action taken as a result of the investigation.

F. Disciplinary proceedings against a multiple certificate holder may apply to one certificate, or more than one, at the discretion of the EMS Medical Director, according to the circumstances of the case.

G. An evaluation and determination by the EMS Medical Director that any of the following actions have occurred constitutes evidence of a threat to the public health and safety and is cause for initiating a formal investigation and possible disciplinary action:

1. Fraud in the procurement of any certification issued under Part 1 of Division 2.5 of the Health and Safety Code.
2. Gross negligence.
3. Repeated negligent acts.
4. Incompetence.
5. The commission of any fraudulent, dishonest or corrupt act, which is substantially related to the qualifications, functions, and duties of prehospital personnel.
6. Conviction of any crime, which is substantially related to the qualifications, functions and duties of prehospital personnel. The record of conviction or certified copy thereof shall be conclusive evidence of such conviction.
7. Violating or attempting to violate directly or indirectly, or assisting or abetting the violation of, or conspiring to violate any provision of Part 1 of Division 2.5 of the Health and Safety Code or of

the regulations adopted by the Authority pertaining to prehospital personnel.

8. Violating or attempting to violate any Federal or State statute or regulation, which regulates narcotics, dangerous drugs or controlled substances.

9. Addiction to the excessive use of, or the misuse of alcoholic beverages, narcotics, dangerous drugs or controlled substances.

10. Functioning outside of the supervision of medical control in the field care system operating at the local level, except as authorized by any other license or certification.

11. Demonstration of irrational behavior or occurrence of physical disability to the extent that a reasonable and prudent person would have reasonable cause to believe that the ability to perform the duties normally expected may be impaired.

12. Unprofessional Conduct Exhibited by any of the following:

    a. The mistreatment or physical abuse of any patient resulting from force in excess of what a reasonable and prudent person trained and acting in a similar capacity while engaged in the performance of his or her duties would use if confronted with a similar circumstance.

    b. The failure to maintain confidentiality of patient medical information, except as disclosure is otherwise permitted or required by law in Sections 56-56.6, inclusive of the Civil Code.

    c. The commission of any sexually related offense specified under Section 290 of the Penal Code.

H. Proceedings for probation, suspension, revocation or denial of a certificate or a denial of a renewal of a certificate, under this division shall be conducted in accordance with the guidelines established by the Emergency Medical Services Authority.

Approved:

Administration **Medical Director**

SUBJECT: PREHOSPITAL EMERGENCY MEDICAL CARE INVESTIGATIVE PROCESS

I. Authority: Health and Safety Code, Division 2.5, Sections 1798.200, 1798.201, 1798.202 and 1798.204.

II. Purpose: To provide an equitable and flexible process whereby the EMS Medical Director may, in a timely manner, take disciplinary action as is necessary to maintain medical control of prehospital EMS personnel and protect the public health and safety; while at the same time ensure that the due process rights of the holder of/or applicant for an EMS prehospital certificate are protected.

III. Policy:

A. The EMS Medical Director should take great care during all phases of the disciplinary process to ensure that the due process rights of an individual are protected.

1. Ensure that the individual receives prompt notice of all proceedings of the disciplinary process.
2. Ensure that the individual is informed of his/her right to counsel or other representation during the disciplinary process.

B. Any information regarding the individual which is considered in the disciplinary process shall be available to the individual and/or his/her legal counsel or designated representative for review. The local EMS agency should take adequate precaution to ensure that the information which would violate another person's legal right to confidentiality is not published.

IV. Procedure:

A. All allegation(s) regarding the performance of EMT-B or Paramedic shall be submitted to the EMS Medical Director, Health and Human Services Agency, Division of Emergency Medical Services, in writing. Such written complaint(s)/allegation(s) should include:

1. The date and time of the occurrence, or as closely approximated as possible.
2. The nature of the occurrence or concern.
3. The names of witnesses or persons who can corroborate the facts.
4. A factual statement describing exactly what transpired.

B. The EMS Medical Director, or designee, shall review and evaluate the information relative to the potential

threat to the public health and safety and determine action warranted.

C. If the EMS Medical Director determines there is reason to believe that disciplinary action may be necessary against a Paramedic, all documentary evidence collected shall be forwarded to the Director of the EMS Authority with a recommendation for further investigation or discipline of the licenseholder. The recommendation and accompanying evidence shall be deemed in the nature of an investigative communication and protected by Section 6254 of the Government Code.

1. The EMS Medical Director may temporarily suspend, prior to hearing, after consultation with the relevant employer, any EMT-Paramedic license upon a determination that:
   a. The licensee has engaged in acts or omissions that constitute grounds for revocation of the license; and,
   b. Permitting the licensee to continue to engage in the licensed activity would present an imminent threat to public health or safety.
2. The local EMS agency shall notify the licensee that his/her paramedic license is suspended and shall identify the reason(s) for the suspension.
3. Within three (3) working days of the initiation of the suspension, the local EMS agency shall transmit to the authority, via fax or overnight mail, all documentary evidence collected relative to the decision to temporarily suspend.

D. If the EMS Medical Director determines there is reason to believe that disciplinary action may be necessary against an EMT-Basic, a formal investigation shall be initiated.

1. The EMT-Basic certificate holder and his/her relevant employer(s) shall be notified in writing, by registered mail, of the investigation. The written notice to the certificate holder and his/her relevant employer(s) shall include:
   a. A statement of the allegation(s) against the certificate holder.
   b. A statement that explains the allegation(s), if found to be true, constitutes a threat to public health

and safety, and is/are cause for the EMS Medical Director to take action pursuant to Section 1798.200 of the Health and Safety Code.

c. An explanation of the possible actions, which may be taken if the allegations are found to be true.

d. A date by which the information must be submitted.

e. A request for a written response to the allegation(s) from the certificate holder.

f. A statement that the certificate holder may submit in writing any information that she/he feels is pertinent to the investigation, including statements from other individuals, etc.

g. An explanation of the investigative review panel (IRP) process, if suspension, revocation, denial or denial of renewal of a certificate may occur.

2. The certificate holder and relevant employer(s) shall be allowed to submit pertinent information, in writing, to the EMS Medical Director.

3. The certificate holder and his/her employer shall be allowed a maximum of five (5) working days to respond to the request for information, unless extenuating circumstances preclude response within that time and the EMS Medical Director determines that an extension of the response time would not jeopardize the public health and safety.

4. The EMS Medical Director or designee shall designate a person or persons to assure that any and all relevant information pertaining to the allegation(s) and to the performance of the certificate holder in regard to the use of prehospital emergency medical skills is gathered.

5. Determination of Appropriate Action:

a. The EMS Medical Director shall determine what action, relative to the individual's certificate(s) if any, should be taken as a result of the findings of the investigation.

b. The nature of the disciplinary action should be proportionate to and related to the severity of the risk to the public health and safety caused by the actions of the holder of, or applicant for, a prehospital EMS certificate.

c. Upon determining the action to be taken relative to a individual's certificate, the EMS Medical Director shall complete and place in the record, a statement certifying the decision made by the Medical Director and the date the decision was made. The statement shall include the signature of the EMS Medical Director, the date the decision was made, and the location where signed.

d. The types of action which could be taken include the following:

(1) No disciplinary action: if the allegation(s) are found to be untrue, unsubstantiated or unrelated to the ability of the certificate holder to perform his/her duties as a prehospital EMS provider, the EMS Medical Director should take no disciplinary action.

(2) Documentation/Monitoring: If substantiation of the allegation(s) is insufficient to justify disciplinary action, but evidence is available which indicates that the allegation(s) may be well founded, the EMS Medical Director may decide to have the behavior of the certificate holder in the field monitored to provide further documentation. If this is done the certificate holder shall be informed that his/her conduct in the field will be monitored for a specified period of time, which will be set by the EMS Medical Director. Monitoring may include, but not be limited to concurrent audits by a designee of the EMS Medical Director, such as the certificate holder's employer or medical supervisor.

(3) Counseling: If the EMS Medical Director determines that the infraction or performance deficiency is minor and the EMS Medical Director thinks that the certificate holder's conduct can be improved by counseling, she/he may choose to have the certificate holder counseled. The counseling session(s) shall include:

(a) A review of the findings of the investigation.

(b) Specific issues of concern.

(c) Improvements expected of the certificate holder, and time frame in which they shall be demonstrated.

(d) Manner(s) in which such improvement may be achieved.

(e) The evaluation method that will be used to assess the certificate holder's improvement.

(f) The EMS Medical Director may designate another person, such as the certificate holder's employer or medical supervisor to provide the specified counseling.

(4) Reprimand: May be determined by the EMS Medical Director if the facts of the case indicate:

(a) A minor infraction that is unlikely to reoccur.

(b) Is not representative of the certificate holder's usual behavior; and,

(c) Is not likely to continue to jeopardize the public health and safety.

(5) Probation: Shall be determined appropriate by the EMS Medical Director if the seriousness of the infraction or performance deficiency indicates a need to monitor the individual's conduct.

(a) The term of the probation will be for a specific period of time, not to exceed one (1) year.

(b) Probation may be chosen in addition to specific remedial counseling/training.

(c) The individual's performance shall be reviewed periodically during the probationary period.

(6) Suspension: May be determined by the EMS Medical Director if in the professional opinion of the EMS Medical Director, an infraction or performance deficiency indicates a need to temporarily remove the certificate holder from the practice of prehospital emergency medical care to protect public health and safety. Suspension may, but need not be immediately effective.

(a) The certificate holder and his/her relevant employer(s) shall be notified in writing prior to or concurrent with the initiation of suspension.

(b) Suspension of the individual's certificate would be for a specific period of time.

(c) The EMS Medical Director based on the facts of the case shall determine the term of suspension and any conditions for reinstatement, such as satisfactory completion of

remedial training.

(d) If the suspension period will run past the expiration date of the individual's certificate, the EMS Medical Director may, at the end of the suspension period, either allow the individual to renew the certificate by the usual process or require the individual to demonstrate that the individual sufficiently retains the necessary knowledge or skills. If the individual cannot demonstrate sufficient retention of the necessary knowledge or skills, as determined by the EMS Medical Director, the individual might be required either to complete specific retraining requirements or to reapply for the certificate as if the individual was a new applicant.

(e) If the affected individual's certificate is being immediately suspended pursuant to this provision and the facts of the matter have not yet been reviewed by an IRP, the certificate holder may, within fifteen (15) calendar days of the date that written notification of the suspension is received, request, in writing, that a special IRP be convened to review the facts which necessitate an immediate suspension. Upon receipt of such a request, the EMS Medical Director shall convene a special IRP to review the facts, which necessitate an immediate suspension of the individual's certificate prior to completion of the investigatory process and determination of final action by the EMS Medical Director.

i. The special IRP review of the facts necessitating the immediate suspension shall be completed and the certificate holder notified of the IRP's recommendation and the EMS Medical Director's decision regarding continuation of the suspension, within twenty-one (21) calendar days of receipt of the request for the special IRP.

ii. The EMS Medical Director shall present evidence for review by the special IRP that he feels, in his expert opinion, demonstrates the necessity for the immediate

suspension of the affected individual's certificate prior to completion of the investigatory process. The EMS Medical Director need not present all of the information gathered at that point in the investigation if he feels, in his professional opinion that disclosure at that time of other information gathered could jeopardize completion of the investigation or of a related investigation, except that any information which contradicts the need for the immediate suspension may not be withheld.

iii. The EMS Medical Director need not complete a special IRP review of the facts necessitating the immediate suspension if a full IRP review of all the facts of the case can be completed, and the certificate holder notified of the final decision of the EMS Medical Director within twenty-one (21) calendar days after request for the special IRP is received.

(7) Revocation, Denial or Denial of Renewal: If the infraction or performance deficiency is such that it is likely that the holder of, or applicant for, a certificate should not practice because of the risk to public health and safety, the EMS Medical Director may revoke, deny or deny the renewal of a certificate.

f. The EMS Medical Director may refuse to accept or process an application for a prehospital emergency medical care certificate from any person whose prehospital emergency medical care certificate or authorization has been revoked, denied, or the renewal denied for any of the reasons listed in Section 1798.200 of Division 2.5, unless the person submits documentation which, in the opinion of the EMS Medical Director, demonstrates that the threat to the public health and safety, which necessitated the denial or revocation, is no longer applicable.

g. If the EMS Medical Director determines that the infraction or performance deficiency is of a minor nature relative to the potential threat to the public health and safety, the EMS Medical Director

may institute disciplinary action without calling a review panel. If so, notice from the EMS Medical Director shall inform the individual that he may request an IRP review, as described herein.

h. If the EMS Medical Director determines that the infraction or performance deficiency may require the suspension, revocation, denial of renewal of a certificate, the EMS Medical Director may convene an IRP to assist in establishing the facts and report its findings.

(1) The IRP shall consist of at least three (3) persons knowledgeable in the provision of prehospital emergency care and local EMS System policies and procedures. One (1) member of the IRP shall be mutually agreed upon by the certificate holder and the EMS Medical Director, if the certificate holder so requests. The IRP shall not include the EMS Medical Director, any local EMS Staff, or anyone who submitted allegations against the certificate holder or who was directly involved in any incident which is included in the investigation.

(2) Within three (3) days of the selection of the IRP, the individual and the individual's employer shall be notified by registered mail of the purpose of the IRP, its membership, and the certificate holder's right to approve one member, the date and time that it will convene and the certificate holder's right to designate another person to accompany him/her to the IRP to provide him/her with advice and support. Both the subject and the EMS Medical Director shall mutually agree upon, any change in the time or date of convening the IRP in writing.

(3) The IRP shall assess all the available information on the matter in order to establish the facts of the case. The certificate holder shall be given the opportunity to be present during the presentation of any testimony before the IRP, allowed to be accompanied by legal counsel or another representative of his/her choosing to provide him/her with advice and support, allowed to testify before the IRP, allowed to call his/her own witnesses and allowed to

question witnesses called by the EMS Medical Director.

(4) The IRP shall make a written report of its findings and its recommendation to the EMS Medical Director (by the date specified by the EMS Medical Director).

(5) The IRP review shall be completed, the findings of the IRP reported to the EMS Medical Director and the certificate holder notified of the IRP's recommendations and the EMS Medical Director's final decision within forty-five (45) calendar days of receipt of the request .for the IRP.

E. Notification of the certificate holder and his/her relevant employer of the action prescribed by the EMS Medical Director shall take place in writing within ten (10) calendar days after making the final determination and shall include the following information:

1. The specific allegation(s), which resulted in the investigation.
2. A summary of the findings of the investigation, including the findings and recommendations of the IRP, if one was convened;
3. The action(s) to be taken, the effective date and the duration of the action(s) including counseling, probation or suspension.
4. Which certificate(s) the action applies to in cases of multiple certificate holders.
5. If no IRP was convened, and the individual's certificate has been suspended, revoked, denied or the renewal denied, an explanation of the individual's rights to request an IRP review of the action including, if the individual certificate has been suspended, the right to request a special IRP to review the facts, which necessitated the immediate suspension.
6. A statement that the certificate holder must report the action to any other local EMS agencies in whose jurisdiction she/he uses the certificate; and,
7. If the certificate holder has been placed on probation, a statement that, during the probationary period, the certificate holder must report the probation if she/he applies for certification or authorization from

another local EMS agency;

8. If the certificate has been suspended, a statement that the certificate holder must report that suspension if she/he applies for any certification or authorization from another local agency during the period of suspension; or

9. If the certificate has been revoked, denied, or the renewal denied, a statement that she/he must report that action if she/he applies for any certification or authorization from another local EMS agency, and that his/her application may not be accepted or processed unless she/he presents documentation which, in the opinion of the Medical Director of the local EMS agency, demonstrates that the threat to public health and safety which necessitated the denial or revocation is no longer applicable.

Approved:

Administration **Medical Director**

SUBJECT: GUIDELINES FOR VERIFICATION OF ORGAN DONOR STATUS **Date: 07/01/05**

I. Authority: Health & Safety Code, Section 7152.5(b).

II. Purpose: To establish guidelines for emergency medical services (EMS) field personnel to search for verification of organ donor status on adult patients for whom death appears imminent.

III. Definitions:

A. Reasonable Search: A brief attempt by EMS field personnel to locate an organ donor document of gift, or other information that may identify a patient as a potential organ donor or one who has refused to make an anatomical gift.

B. Imminent Death: A condition wherein illness or injuries are of such severity that, in the opinion of EMS personnel, death is likely to occur before the patient arrives at the receiving hospital. For purposes of this policy, this definition does not include any conscious patient regardless of the severity of illness or injury.

IV. Policy:

A. When EMS field personnel encounter an unconscious adult patient for whom it appears death is imminent they shall attempt a "reasonable search" of the patient's belongings to determine if the individual carries an organ donor document of gift or other information indicating the patient's status as an organ donor.

B. Treatment and transport of the patient remains the highest priority for field personnel. This search shall not interfere with patient care or transport.

C. Field personnel shall notify the receiving hospital personnel if organ donor document of gift or other information is discovered. Advanced life support units shall notify the base hospital in addition to the receiving hospital personnel.

Approved:

Administration **Medical Director**

D. Any organ donor document of gift or other information that is discovered shall be transported to the receiving hospital with the patient, unless an investigating law enforcement officer requests it. In the event that no transport is made, any organ document of gift or other information shall remain with the patient.

E. Field personnel shall briefly note the results of the search on the EMS Prehospital Patient Record.

F. No search is to be made by EMS personnel after the patient has expired.

G. If a member of the patient's immediate family objects to the search for an organ donor document of gift or other information at the scene, their response to a question about the patient's organ donation wishes shall satisfy the requirement.

Approved:

Administration **Medical Director**

I. **Authority:** Division 2.5, Health and Safety Code, Sections 1797.204 and 1798; and Evidence Code, Sections 1040 and 1157.7.

II. **Purpose:** To establish the scope, membership and functions of an advisory committee to the local Emergency Medical Services (EMS) agency. This committee shall meet to monitor and evaluate the medical care of identified patients with traumatic injury.

III. **Policy**

A. The scope of the committee shall include, but not be limited to:

1. Review of trauma deaths in the County
2. Evaluation of trauma care
3. Provision of input to the local EMS agency in the development, implementation and evaluation of medical audit criteria
4. Design and monitoring of corrective action plans for trauma medical care
5. Assistance and participation in research projects
6. Provision of medical care consultation at the request of the County of San Diego Division of EMS (County EMS), including on-site facilities evaluation by committee members
7. Establishment of subcommittees of outside consultants at the request of County EMS
8. Recommendation of process improvement strategies related to trauma care

B. Membership:

The committee shall be comprised of the following:

1. Members:
   a. Trauma Center Medical Directors from all designated centers

Approved:

Administrator **Medical Director**

b. Trauma Nurse Coordinators from all designated Trauma Centers

c. County EMS Trauma System Coordinator/Trauma Quality Assurance Specialist

d. County Trauma System Surgical Consultant

e. Base Hospital Physician representing the Prehospital Audit Committee (PAC)

f. Neurosurgeon appointed by the Academy of Neurosurgeons

g. Anesthesiologist appointed by the Anesthesia Association

h. Orthopedic Surgeon

i. Emergency Physician not affiliated with a trauma center, appointed by San Diego Emergency Physicians Society

j. County EMS Medical Director

2. Ad Hoc Members that may participate:

a. Trauma Base Hospital Medical Directors

b. Medical Director Air Medical Services

c. Designated Assistant Trauma Medical Directors or Trauma Surgeon staff of trauma centers

d. Approved physicians enrolled in Trauma fellowships

e. Trauma Center Intensivists

f. Assistant Trauma Coordinators

g. Physicians from non-trauma facilities who are presenting cases

h. President of the Medical Society

Approved:

Administrator **Medical Director**

i. General surgeon appointed by the Society of General Surgeons

j. County EMS Administrator/appropriate Division staff

k. Managed care physician representative appointed by County EMS.

C. Attendance:

1. Members should notify County EMS staff (285-6429) in advance of any scheduled meeting they would be unable to attend. Attendance at these meetings for the Trauma Medical Directors and Trauma Nurse Coordinators or their designees is mandatory. The Trauma Medical Directors and the Trauma Nurse Coordinators should use their best efforts to attend 90% of the scheduled MAC meetings annually. After three (3) consecutive absences in a calendar year, an appointed member may be replaced on the Committee.

2. Resignations from the committee shall be submitted, in writing to County EMS.

3. Invitees may participate in the medical review of specified cases where their expertise is requested. All requests for invitees must be approved by County EMS in advance of the scheduled meeting.

4. Invitees not participating in the medical review of specified cases must be approved by County EMS and all Trauma Medical Directors.

D. Voting:

Due to the "advisory" nature of the committee, many issues require consensus rather than a vote process. Vote process issues will be identified

as such by the Chairperson. When voting is required, the majority of the voting members of the committee need to be present. Voting members may include Trauma Medical Directors, Trauma Nurse Coordinators and the appropriate physician specialist. Members may not participate in voting when a conflict of interest exists.

E. Meetings:

The committee shall meet at least six (6) times per year at times arranged by County EMS/MAC.

F. Committee Documentation:

Minutes will be kept by County EMS staff and distributed to the members at each meeting. Due to the confidentiality of the committee, confidential committee documents will be collected by County EMS staff at the close of each meeting and no copies may be made or possessed by members of the Committee. All official correspondence and communication generated by the Medical Audit Committee will be approved by County EMS staff and sent on San Diego County letterhead.

Approved:

Steven Jones
Administrator

Medical Director

G. Confidentiality:

All proceedings, documents and discussions of the Medical Audit Committee are confidential and are covered under Sections 1040 of the Government Code and 1157.7 of the Evidence Code of the State of California. The prohibition relating to discovery of testimony provided to the Committee shall be applicable to all proceedings and records of this Committee, which is one established by a local government agency to monitor, evaluate and report on the necessity, quality and level of specialty health services, including, but not limited to, trauma care services. Issues which require prehospital medical/system input may be sent to the confidential Prehospital Audit Committee.

Approved:

Steven Jones
Administrator

Medical Director

SUBJECT: PATIENT INFORMATION/CONFIDENTIALITY **Date: 07/01/04**

I. Authority: Confidentiality of Medical Information Act (Civil Code, Section 56 et. seq.) Title 22, Division 9, Sections 100075, 100159, Health Insurance Portability and Accountability Act. (HIPAA).

II. Purpose: To describe the conditions and circumstances by which protected health information may be released.

III. Definitions: Protected Health Information (PHI) – HIPAA regulations define health information as:

"any information, whether oral or recorded in any form or medium" that

- "is created or received by a health care provider, health plan, public health authority, employer, life insurer, school or university, or health care clearinghouse" and,
- "relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual, or the past, present, or future payment for the provision of health care to an individual."

IV. Policy

A. All prehospital provider agencies shall have policies in place regarding the disclosure of PHI of EMS patients.

B. Prehospital provider agencies shall designate a Public Information Officer (PIO) or other designated person(s) authorized to release operational or general information, as authorized by State and Federal law.

Approved:

Administration	**Medical Director**

C. PHI may not be disclosed by prehospital personnel, except as follows:

1. To other care givers to whom the patient care is turned over, for continuity of patient care (including the prehospital patient record).
2. To the County of San Diego, Base Hospital or provider agency quality improvement program (including the provider agency supervisory personnel).
3. To the patient or legal guardian.
4. To law enforcement officers in the course of their investigation under the following circumstances:
    a. As required by law (e.g. court orders, court-ordered warrants, subpoenas and administrative requests).
    b. To identify or locate a suspect, fugitive, material witness or missing person.
    c. In response to a law enforcement official's request for information about a victim or suspected victim of a crime.
    d. To alert law enforcement of a person's death if the covered entity suspects that criminal activity caused the death.
    e. When a covered entity believes that PHI is evidence of a crime that has occurred on the premises.

Approved:

Administration	**Medical Director**

f. In a medical emergency and it is necessary to inform law enforcement about the commission and nature of a crime, the location of the crime or crime victims, and the perpetrator of the crime.

5. To the provider agency's billing department, as needed for billing purposes.

6. In response to a properly noticed subpoena, court order or other legally authorized disclosure.

C. Any prehospital records (recorded or written), used for training or continuing education purposes, must be edited to remove identifying patient/incident information.

Approved:

Administration **Medical Director**

SUBJECT: DOWNGRADE OR CLOSURE OF EMERGENCY SERVICES IN A HOSPITAL DESIGNATED AS A BASIC EMERGENCY RECEIVING FACILITY **Date: 07/01/03**

I. **Authority:** Health and Safety Code, Division 2.5, Section 1300.

II. **Purpose:** To identify the procedures instituted prior to closure or downgrade of emergency services provided by a licensed acute care hospital with a permit to provide basic or comprehensive emergency services.

III. A. Hospitals planning to close or downgrade their capacity to provide emergency services shall notify the Division of Emergency Medical Services (EMS) of their intent at least 90 days prior to the scheduled change, in accordance with applicable regulations. This notification shall provide the Division of EMS with the following information:

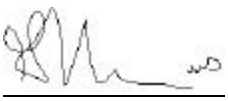
1. Rationale for downgrade or closure.
2. Proposed timeline for downgrade or closure.
3. Annual patient volume seen in the emergency department.
4. Any other services provided by the hospital that may additionally be impacted by the emergency department closure/downgrade.
5. Plans for community notification including the scheduling of mandated public hearings.

B. Upon notification that a hospital intends to close or downgrade the level of emergency services offered pursuant to its permit to operate a basic or comprehensive emergency facility, the San Diego County Division of Emergency Medical Services shall conduct an evaluation of the potential impact to prehospital emergency care providers and upon the remaining emergency care facilities in the geographic area. The impact evaluation and a public hearing shall occur within 60 days of receiving notification of the intent of closure.

This impact evaluation shall include the following:

Approved:

Administration



EMS Medical Director

1. **Geographical Data** regarding facility isolation, service area population density, travel time and distance to next closest facility, number and type of other available emergency services, and availability of prehospital resources.
2. **Base Hospital Designation** information to include the number of calls received, number of patients received, and impact on patients, prehospital personnel and other Base Hospitals.
3. **Trauma Care** impact based on the number of patients received, and impact on remaining hospitals, trauma centers and trauma patients.
4. **Specialty Services Provided** that are not readily available at other community facilities and the next nearest availability of those services such as burn center, neurosurgery, pediatric, critical care, etc.
5. **Patient Volume** on an annual basis including both 9-1-1 transports, transfers and walk-in patients.
6. **Public Notification** of the intended downgrade or closure has occurred with a minimum of one public hearing in addition to advertisement to the community via publications, education sessions or media forums.

C. In addition to performing the impact evaluation, the Division of Emergency Medical Services shall:

1. Notify and consult with all prehospital health care providers and hospitals in the geographical area regarding the potential closure or change.
2. Notify all planning or zoning authorities prior to completing an impact evaluation.
3. Provide, in writing, a copy of the Division's impact evaluation to the California EMS Authority and the California State Department of Health Services within three (3) days of the completion of the impact evaluation.

Approved:

Administration **EMS Medical Director**

SUBJECT: EMS FOR CHILDREN (EMSC) ADVISORY COMMITTEE **Date: 07/19/02**

I. **Authority:** Health and Safety Code, Division 2.5, Section 1798 and 1797.204 and Chapter 12, 1799.

II. **Purpose:** To establish the scope, membership and functions of an advisory committee to the Division of Emergency Medical Services (EMS). This committee will provide consultation, medical protocol review, evaluate and make recommendations regarding medical care, access to care, medical preparedness, community preparedness and illness and injury prevention regarding children to the Medical Director of the Division of Emergency Medical Services (EMS). [1]

III. **Policy:** The EMS Medical Director may consult with the EMSC Advisory Committee on issues concerning pediatric system, protocol, education, medical care delivery, community preparedness and prevention within County of San Diego.

A. Membership: The EMS-C Advisory/Steering Committee will have the following membership:

1. Base Station Physicians' Committee representative;
2. Hospital Administration /Association Representative;
3. One physician member representing Children's Hospital Emergency Dept. physician staff;
4. One physician member representing the Medical Society Emergency Physicians or a Non-Trauma Center, non-Base Hospital Emergency Department physician;
5. One physician member representing AAP or COPEM;
6. One physician member representing U.S. Naval Hospital;
7. One physician member representing private practice pediatrics;
8. One member representing Community Injury Prevention;
9. One member representing approved paramedic training programs;
10. One member representing the San Diego County Paramedic Association;
11. One member representing the Base Hospital Nurse Coordinators Committee;
12. One member representing Children's Hospital Emergency Department nursing staff;
13. One member representing the pediatric Trauma Center; and,
14. One member representing community, i.e. Parents-Teachers Association.

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[1] EMSC Project, Final Report, CA EMSA #196, 1994
EMSC Five Year Plan, Goals & Objectives 2001-5, CA EMSA

Approved:

Administration	**EMS Medical Director**

B. The responsibilities of the EMS-C Advisory Committee are:

1. To develop a system EMS-C plan listing goals, priorities and time line.
2. To convene small task forces of the Advisory Committee and others to work with the EMS Medical Director or designee on specific medical management issues and community initiatives.
3. To consult with other medical specialties, community representatives or other advisory bodies in the County of San Diego, as necessary.
4. To provide steering recommendations for the implementation of EMSC related projects.
5. To develop recommended policy/guidelines/protocols/procedures concerning medical care delivery for children, community preparedness, access to medical care and illness and injury prevention.
6. To develop programs providing public education concerning EMSC and related projects.
7. To participate in the implementation of approved policy/guidelines/programs/ protocols/ procedures concerning access to and medical care delivery for children, community preparedness and illness and injury prevention as requested by EMS.

C. Attendance:

1. Members should notify Division of EMS staff (619-285-6429) in advance of any scheduled meeting they would be unable to attend.
2. An appointed member may be replaced after two consecutive absences.

D. Voting:

1. Due to the "advisory" nature of the committee, many issues require consensus rather than a vote process. The Chairman will identify issues requiring a vote and the vote process.
2. When voting is required, a simple majority of committee members needs to be present. Members may not participate in voting when a conflict of interest exists.

E. Meetings:

The committee shall meet at least four (4) times per year at times arranged by the Division of EMS.

Approved:

Administration **EMS Medical Director**

SUBJECT: CARDIOVASCULAR ADVISORY COMMITTEE (CAC) **Date: 08/01/06**

I. **Authority:** Health and Safety Code, Division 2.5, Section 1798; and Evidence Code, Sections 1157.7.

II. **Purpose:** To designate an advisory committee to provide consultation, medical protocol review, and recommendations on issues concerning prehospital treatment protocols and emergency medical care delivery for patients with acute coronary syndromes to the Medical Director of the County of San Diego Emergency Medical Services (EMS).

III. **Policy:** The County of San Diego EMS Medical Director may consult with the San Diego County Cardiovascular Advisory Committee on issues concerning prehospital treatment protocols and emergency medical care delivery for patients with acute coronary syndromes in San Diego County.

A. **The Scope : not limited to**

1. Provision of input to County of San Diego EMS in the development, implementation and evaluation of medical audit criteria.
2. Designing and monitoring corrective action plans on cardiovascular care.
3. Provision of medical care consultation at the request of the County of San Diego EMS.
4. Recommendation of performance improvement strategies related to care of patients with acute myocardial infarction.

B. **Membership** : County of San Diego EMS Medical Director's Cardiovascular Advisory Committee will have the following members:

1. One Cardiovascular "STEMI" Program Medical Director from each designated Cardiovascular "STEMI" Receiving Center (SRC).
2. One SRC Program Manager or designee from each designated SRC.

Approved:

Administration **EMS Medical Director**

3. San Diego County EMS "STEMI" Program Coordinator (QA Specialist).
4. One cardiologist representing non-certified centers from the San Diego County Medical Society or as appointed by EMS.
5. One emergency physician representing the County of San Diego's Base Station Physician's Committee (BSPC).
6. One emergency physician representing the San Diego County Medical Society EMS Oversight Committee (EMOC) from a non-designated SRC.
7. San Diego County EMS Medical Director.

C. **Ad Hoc Members that may participate:**

1. Managed care cardiologist representative appointed by EMS.
2. One emergency physician representing EMOC from a designated SRC.
3. One representative from County Paramedic Agencies Committee (CPAC).
4. One nurse representing the Base Hospital Nurse Coordinator's Committee.
5. County EMS Administrator/appropriate EMS staff.
6. Other members as appointed by the EMS Medical Director.
7. Paramedic representative of the County Paramedic Association.
8. Paramedic Training agency representative.

D. **Responsibilities**

1. To meet as an advisory committee on a quarterly basis.
2. To develop an agenda in conjunction with the County of San Diego EMS Medical Director or designee.
3. To consult on prehospital and hospital acute coronary syndrome issues.

Approved:

Administration **EMS Medical Director**

4. To convene small task forces/subcommittees of advisory committee members and others to work with the County of San Diego EMS Medical Director or designee on specific medical management issues.
5. To consult with other medical specialties, or other advisory bodies in the County, as necessary.

E. **Attendance**

1. Participation by the SRC Medical Directors and SRC Managers in the County of San Diego Cardiovascular Advisory Committee's (CAC) performance improvement process is mandatory. Attendance at quarterly meetings is encouraged.
2. Invitees may participate in the medical review of specified cases where their expertise is requested. All requests for invitees must be approved by County of San Diego EMS STEMI QA Specialist in advance of the scheduled meeting.
3. County of San Diego EMS and all SRC Medical Directors present must approve the invitees observing case reviews in which the invitees are not participating.

F. **Voting**

1. The CAC will elect a chairperson who must be a SRC Medical Director, annually.
2. Due to the "advisory" nature of the committee, many issues require consensus rather than a vote process. Vote process issues will be identified as such by the Chairperson. When voting is required, a "simple" majority of the voting members of the committee need to be present to constitute a quorum. Members may not participate in voting when a conflict of interest exists.
3. There will be one vote from each SRC that may be registered by either the SRC Medical Director or the SRC Program Manager/designee.

G. **Confidentiality**

All proceedings, documents and discussions of the Cardiovascular Advisory Committee are confidential and are covered under Section 1157.7 of the Evidence Code of the State of California. The prohibition relating to discovery of testimony provided to the Committee shall be applicable to all proceedings and records of this Committee, which is one established by a local government agency to monitor, evaluate and report on the necessity, quality and level of specialty health services, including, but not limited to, cardiovascular services. Issues, which require prehospital medical/system input, may be sent to the confidential Prehospital Audit Committee.

Approved:

Administration **EMS Medical Director**

SUBJECT: DESIGNATION OF A CARDIOVASCULAR "STEMI" RECEIVING CENTER (SRC) **Date: 08/01/06**

I. Authority: Division 2.5 Health and Safety Code, Section 1797.67, 1798 and 1798.170.

II. Purpose: To define the process and procedure for designating a Cardiovascular "STEMI" Receiving Center.

III. Policy:

The Board of Supervisors or designee shall approve recommendations for Cardiovascular "STEMI" Receiving Center designations.

1. The designation SRC will be a non-competitive process based on past performance of the acute care hospital's emergency department, cardiac catheterization laboratory, staff and on-call interventionalists and on its ability to provide required services and willingness to participate in the performance improvement process.
2. The designation of an SRC for purposes of the County of San Diego Emergency Medical Services (EMS) confers upon the facility, the recognition that it has the commitment, personnel and resources necessary to provide optimum medical care for the patient with a acute myocardial infarction, to include, but not limited to the ability to provide prompt percutaneous coronary interventions and to meet outcome benchmarks.

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3. The designation as a SRC is specific to the cardiac catheterization laboratory's location and is not transferable.
4. Each designated SRC shall meet the criteria set forth in their agreement and demonstrate a continuous ability and commitment to comply with policies, protocols and procedures developed by the County of San Diego EMS.
5. Each designated SRC's shall undergo an annual performance evaluation based upon their agreement. Results of the evaluation shall be made available to the designated facility.
6. All designated SRC's shall participate in the quality improvement process as outlined in the *Cardiovascular Performance Improvement Manual and Data Dictionary.*

II Procedure:

A. The County of San Diego EMS develops and distributes an Application for Designation as a Cardiovascular "STEMI Receiving Center (SRC).

B. The County of San Diego EMS evaluates applications, including an independent review process and on-site evaluation and makes recommendations to the Board of Supervisors.

Approved:

Administration **EMS Medical Director**

I. Authority: Division 2.5, Health and Safety Code, Section 1797.67, 1798 and 1798.170.

II. Purpose: To establish a policy and procedure for de-designation of a "STEMI" receiving center (SRC).

III. Policy

A. Termination for Cause:

1. The County of San Diego may immediately terminate its Cardiovascular "STEMI" Receiving Center (SRC) Memorandum of Agreement (MOA), if a receiving center's license to operate as a general acute care hospital is revoked or suspended.
2. The County of San Diego may immediately terminate its SRC MOA, if the hospital no long operates as a receiving center with a "Basic or Comprehensive" Emergency Department.
3. The County of San Diego may immediately suspend its MOA upon written notice if a SRC is in gross default of material obligation under its MOA which default could adversely affect patient care provided by Contractor.
4. For any other material breach of its MOA, The County of San Diego may terminate a receiving center MOA for cause, per the language of the Agreement. Such cause shall include, but not be limited to:

    a) Failure to comply with material terms and conditions of the SRC MOA, after notice of the failure has been given.

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b) Failure to make available sufficient, qualified personnel and hospital resources to provide immediate care for acute myocardial infarction patients as required by the MOA.

b) Failure to provide timely cardiac interventionalist coverage for acute myocardial infarction patients as required by the MOA.

c) Failure to provide physicians, surgeons, and other medical, nursing and ancillary staff who possess that degree of skill and learning ordinarily possessed by reputable medical personnel in like or similar localities and under similar circumstances for the provision of medical services for acute myocardial infarction patient requiring percutaneous coronary interventions.

d) Gross misrepresentation or fraud.

e) Substantial failure to cooperate with the County of San Diego EMS monitoring of SRC services.

f) Substantial failure or refusal to cooperate with quality assurance and audit findings and recommendations within a reasonable time.

B. Termination for Convenience:

Either the County of San Diego or the SRC may terminate the SRC MOA, as a termination for convenience per the language of the Agreement.

C. Upon the de-designation of a receiving center, the County of San Diego l EMS shall be responsible for system redesign decisions.

Approved:

Administration **EMS Medical Director**

SUBJECT: TREATMENT PROTOCOL -- INTRODUCTION **Date: 7/1/06**

INTRODUCTION

These Protocols define the basic and advanced life support treatment and disposition standards for San Diego County.

1. These treatments are listed in sequential order for each condition.
   Adherence is recommended.
   All skills follow the criteria in the Skills List.

2. All treatments may be performed by the EMT-B (BLS treatments) and/or paramedic without an order EXCEPT for those stating "Base Hospital Order (BHO)" or "Base Hospital Physician Order (BHPO)".
   All treatments requiring an order are at the discretion of the Base Hospital providing medical direction. Standing orders may be implemented at the discretion of the field EMT-B/paramedic and may be continued following the initial notification.
   Once a complete patient report is initiated:
   - All BH orders supersede any standing orders except defibrillation, precordial thump and intubation.
   - ALL subsequent medication orders MUST be from that Base **(S-415)**.

3. **BHPO (Base Hospital Physician Order)**: BHPOs may be relayed by the MICN.
   Physician must be in direct voice contact for communication with another physician on scene.

4. Abbreviations and definition of terms are attached.

5. All medications ordered are to be administered as described UNLESS there is a contraindication, allergy or change in condition.

6. Cardioversion when listed in the protocols is always synchronized.

7. Personal protective equipment must be used on all patient contacts per provider agency policy (S-009).

8. PEDIATRIC SPECIAL CONSIDERATIONS:
   a. A pediatric patient is defined as appearing to be <15 yo.

   b. Pediatric cardioversion is CONTRAINDICATED whenever the defibrillator unit is unable to deliver <5w/s/kg or equivalent biphasic.

   c. Medications are determined by use of length based resuscitation tape; refer to the pediatric drug cart, P-117. Children ≥ 37 kg. follow adult protocols and medication dosages regardless of age.

9. In a multiple patient incident, the paramedic team may split per standing orders.
   Base hospital contact should be made to confirm destination prior to leaving scene or ASAP enroute.
   If the paramedic team is split, each paramedic may still perform ALS duties.

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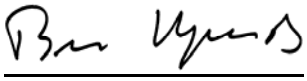

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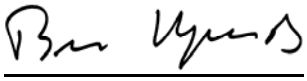

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SUBJECT: TREATMENT PROTOCOL -- GLOSSARY OF TERMS **Date: 7/1/05**

GLOSSARY OF TERMS

Apparent Life Threatening Event (ALTE): an episode involving an infant less than 12 months of age which includes one or more of the following:

1) Apnea
2) Color change (cyanosis, pallor)
3) Marked change in muscle tone (limpness or stiffness)
4) Unresponsiveness

Definitive therapy: Administration of a fluid bolus or medications.

End Tidal CO_2 Detection Device: Disposable end tidal CO_2 detection devices are approved for prehospital use in San Diego County for patients ≥15 kg and for patients < 15 kg. Non-disposable end tidal CO_2 detection-monitoring devices are optional and may be utilized in place of disposable devices.

Esophageal Tracheal Airway Device (ETAD): The "Combitube" is the only such airway approved for prehospital use in San Diego County.

IV/IO: Intravenous/Intraosseous fluids are routinely Normal Saline.

Minor: A person under the age of 18 and who is not emancipated.

Opioid: Any derivative, natural or synthetic, of opium or morphine or any substance that has their effects on opioid receptors (e.g. analgesia, somnolence, respiratory depression).

Opioid Dependent Pain Management Patient: An individual who is taking prescribed opioids for chronic pain management, particularly those with opioid infusion devices.

Opioid Overdose, Symptomatic: Decreased level of consciousness or respiratory depression.

Nebulizer: O_2 powered delivery system for administration of Normal Saline or medications.

Pediatric Patient: Children appearing to be <15 years and appearing to weigh less than 37 kg (81lbs.).
Newborn: up to 30 days
Infant: one month to one year of age.

SD BREATHE: Acronym for the steps to be performed in the assessment and documentation of endotracheal intubation attempts:
Size, **D**epth, **B**reath Sounds, **R**ise & Fall of Chest, **E**sophageal Detection Device, Absence of **A**bdominal Sounds, **T**ube Misting, **H**ospital Verification, **E**nd Tidal CO_2 Detection Device.

"Shock" is defined by the following criteria:
Patient's age:

1. ≥ 15 years:
   Systolic BP <80 mmHg **OR**
   Systolic BP <90 mmHg AND exhibiting any of the following signs of inadequate perfusion:
   a. altered mental status (confusion, agitation)
   b. tachycardia
   c. pallor
   d. diaphoresis

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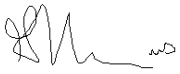

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2. <15 yrs:
   Systolic BP < [70 + (2 x age)] **AND**
   exhibiting any of the following signs of inadequate perfusion:
   a. altered mental status (confusion, agitation)
   b. tachycardia (<5yrs ≥180bpm; ≥5yrs ≥160bpm)
   c. pallor
   d. diaphoresis
   e. comparison (difference) of peripheral vs. central pulses (PALS/PEPP).

Sinus pause: A brief break in tachydysrhythmia that immediately reverts back. During the pause the actual underlying dysrhythmia may be evident. Adenosine is unlikely to convert this dysrhythmia.

Unconsciousness: No purposeful response to stimulation.

Unstable (adult): Systolic BP<90 and chest pain, dyspnea or altered LOC.

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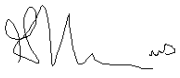

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SAN DIEGO COUNTY TREATMENT PROTOCOL
ABBREVIATION LIST

AED	Automated External Defibrillator
AICD	Automatic Implanted Cardiac Defibrillator
ALS	Advanced Life Support (Paramedic level)
ALTE	Apparent Life Threatening Event
AV	Arterio-Venous (fistula)
BH	Base Hospital
BHO	Base Hospital Order
BHPO	Base Hospital Physician Order
BLS	Basic Life Support (EMT level)
BP	Blood Pressure
BPM	Beats Per Minute
BS	Blood Sugar (Blood Glucose)
BSA	Body Surface Area
$CaCl_2$	Calcium Chloride
C/C	Chief complaint
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CPR	Cardio-Pulmonary Resuscitation
CVA	Cerebrovascular Accident
d/c	Discontinue
dl	Deciliter
D_{25}	25% Dextrose (diluted D_{50})
D_{50}	50% Dextrose
EKG	Electrocardiogram
ET	Endotracheal Tube
ETAD	Esophageal Tracheal Airway Device
GM or Gm	Gram
HR	Heart Rate
ICS	Intercostal space
IM	Intramuscular (injection)
IO	Intraosseous line
IV	Intravenous line
IVP	Intravenous Push
J	Joule (s)
Kg	Kilogram
L	Liter
LOC	Level of Consciousness or Loss of Consciousness
max	Maximum
mcg	Microgram
mEq	Milliequivalent
mg	Milligram
min	Minute

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ml	Milliliter(s)
MOI	Mechanism of injury
MR	May repeat
MS	Morphine Sulfate
$NaHCO_3$	Sodium Bicarbonate
NG	Nasogastric (tube)
NPO	Nothing by mouth
NS	Normal Saline (IV solution)
NTG	Nitroglycerin
O_2	Oxygen
OD	Overdose
PEA	Pulseless Electrical Activity
PO	Per Os (by mouth)
prn	Pro Re Nata (as often as necessary)
PVC	Premature Ventricular Complex
q	Every
SL	Sublingual
SC	Subcutaneous (injection)
SO	Standing Order
SOB	Shortness of Breath
STEMI	ST Elevation Myocardial Infarction
SVT	Supraventricular Tachycardia
TIA	Transient Ischemic Attack
TKO	To Keep Open (IV) which is approximately 25-30ml/hr
VF	Ventricular Fibrillation
VSM	Valsalva Maneuver
VT	Ventricular Tachycardia
yo	Years Old
?	Possible/questionable/suspected
"	Minutes or Inches
<	Less than
≥	Greater than or equal to

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SUBJECT: BLS/ALS AMBULANCE INVENTORY **Date: 7/1/06**

I. Authority: Health and Safety Code, Division 2.5, Section 1797.204.

II. Purpose: Identify a minimum standardized inventory on all Basic Life Support and Advanced Life Support Transport Units.

III. Policy: Essential equipment and supplies are required by California Code of Regulations, Title 13, Section 1103.2(a) 1-2 (for vehicle requirements refer to Policy # B 833). Each Basic Life Support or Advanced Life Support Transporting Unit in San Diego County shall carry as a minimum, the following:

Basic Life Support Requirements:

	Minimum
Ambulance cot and collapsible stretcher	1 each
Straps to secure the patient to the cot or stretcher	1 set
Ankle and Wrist Restraints	1 set
Linens (Sheets, pillow, pillow case, blanket, towels)	2 sets
Oropharyngeal Airways	
Adult	2
Pediatric	2
Infant	1
Newborn	1
Pneumatic or rigid splints	4
Bag-valve-mask w/reservoir and clear resuscitation mask	
Adult	1
Pediatric	1
Infant	1
Oxygen Cylinder w/wall outlet (H or M)	1
Oxygen tubing	1
Oxygen Cylinder - portable (D or E)	2
Oxygen administration mask	
Adult	4
Pediatric	2
Infant	2
Nasal cannulas (clear plastic) Adult	4
Nasal airways (assorted sizes)	1 set
Nebulizer for use w/sterile H_2O or saline	2
Glucose Paste/Tablets	1 tube or 9 tablets
Bandaging supplies	
4" sterile bandage compresses	12
3x3 gauze pads	4
2", 3", 4" or 6" roller bandages	6
1", 2" or 3" adhesive tape rolls	2
Bandage shears	1
10"x 30" or larger universal dressing	2
Emesis basin (or disposable bags)	1
Covered waste container	1
Portable suction equipment (30 L/min, 300 mmHg)	1
Suction device - fixed (30 L/min, 300 mmHg)	1
Suction Catheter - Tonsil tip	3
Suction Catheter (6, 8, 10, 12, 14, 18)	1 set

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Head Immobilization device	2 each
Spinal Immobilization devices (1 min. 30", 1 min. 60") with straps**	1 each
Cervical collars - rigid	
Adult	3
Pediatric	2
Infant	2
Traction splint*	
Adult or equivalent	1
Pediatric or equivalent	1
Blood pressure manometer & cuff	
Adult	1
Pediatric	1
Infant	1
Obstetrical Supplies to include:	1 kit
gloves, umbilical tape or clamps, dressings, head coverings, ID bands, towels, bulb syringe, sterile scissors or scalpel, clean plastic bags	
Potable water (1 gallon) or Saline (2 liters)	1
Bedpan	1
Urinal	1
Disposable gloves - non-sterile	1 box
Disposable gloves - sterile	4 pairs
Cold packs	2
Warming packs (not to exceed 110 degrees F)	2
Sharps container (OSHA approved)	1
Agency Radio	1
EMS Radio	1

Optional Item:

Positive Pressure Breathing Valve, maximum flow 40 Liters/min.
Mark 1 Kit(s) or equivalent

Advanced Life Support Requirements:

All supplies and equipment in Basic Life Support Requirements in addition to the following:

A. Airway Adjuncts:	Minimum
Aspiration based endotracheal tube placement verification devices	2
End Tidal CO_2 Detection Devices (<15kg, ≥15kg) **OR**	2 each
Quantitative End Tidal CO_2 Capnography (optional item)	1
Endotracheal Tubes: Sizes:	
2.5, 3.0, 3.5, 4.0, 4.5, 5.0 (uncuffed)	1 each
5.5 (cuffed or uncuffed)	1
6, 6.5, 7, 7.5, 8, 8.5, 9 (cuffed)	1 each
Esophageal Tracheal Double Lumen Airway (Kit) (Combitube):Reg, Sml Adult**	2 each
ET Adapter (nebulizer)	1 setup
Feeding Tube - 5, 8 French	1each
Laryngoscope - Handle	2
Laryngoscope - Blade:	
curved and straight sizes 0-4	1each
curved sizes 3-4	1 each
Magill Tonsil Forceps small and large	1 each
Mask - Bag-valve-mask Neonate size	1
Stylet *6 and 14 French,* Adult	1 each

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EMS Medical Director

B. Vascular Access/Monitoring Equipment			Minimum
Armboard: Long			2
Armboard: Short			2
Blood Glucose Monitoring Device**			1
IV Administration Sets:	Macrodrip		6
	Microdrip		3
Three-Way Stopcock with extension tubing			2
IV Tourniquets			4
Needles:	IV Cannula - 14 Gauge		8
	IV Cannula - 16 Gauge		8
	IV Cannula - 18 Gauge		8
	IV Cannula - 20 Gauge		6
	IV Cannula - 22 Gauge		4
	IV Cannula - 24 Gauge		4
	IM - 21 Gauge X 1"	6	
	IO –Jamshidi-type needle – 18 Gauge		*2*
	IO – Jamshidi-type needle – 15 Gauge		*2*
	S.C. 25 Gauge X 3/8"		4
Syringes: 1 ml, 3 ml, 5 ml, 10 ml, 20 ml			3 each
C. Monitoring			
___12 Lead EKG			1
Conductive Gel/Defibrillator pads			1 tube/2 pkgs
Defibrillator/ Scope Combination			1
Defibrillator Paddles *(4.5 cm,* 8.0 cm*)* or Pads (hands free)			1 pair each
Electrodes			1 box
Electrode Wires			2 sets
Oxygen Saturation Monitoring Device **			1
	Adult probe		1
	Infant/Pediatric		1
D. Packs			
Drug Box			1
Personal Protective Equipment (masks, gloves, gowns, shields)			2 sets
Trauma Box/Pack			1
E. Other Equipment			
Broselow Tape			1
Nasogastric Intubation Set-Up (10, 12 or 14, 18 French 48")			1 each
Pediatric Drug Chart (laminated)			1
Thermometer - Oral, Rectal			1 each
Water Soluble Lubricant			1

Approved:

EMS Medical Director

SUBJECT: BLS/ALS AMBULANCE INVENTORY **Date: 7/1/06**

F. Communication Items:

	Minimum
Communication Failure protocol (laminated)	1
Standing Orders Protocol (laminated)	1

G. Replaceable Medications:

Adenosine	6 mg/2ml	6 vials
Albuterol	2.5 mg/3 ml or 0.083%	6 vials
ASA, chewable	80 mg each individually wrapped	6 units
Atropine Sulfate	1 mg/10 ml	3
Atropine Sulfate	multidose 0.4 mg/ml	1
Atrovent	2.5 ml (1 unit dose vial) or 0.02%	2
Calcium Chloride	1 GM/10 ml	1
Charcoal activated (no sorbitol)	50 GM	1
Dextrose, 50%	25 GM/50 ml	2
Diphenhydramine HCL	50 mg/1 ml	2
Dopamine HCL	400 mg	1
Epinephrine	1:1,000 multidose vial	1
Epinephrine	1:1,000 (1 mg/1ml ampule)	6
Epinephrine	1:10,000 (1 mg/10 ml vial)	6
Furosemide	20 mg/40 mg/100 mg vial	100mg total
Glucagon	1 ml (1 unit)	1
Lidocaine HCL	100 mg/5 ml (2%)	6
Morphine Sulfate (injectable)	10 mg/1 ml	2
Morphine Sulfate (Oral Immediate Release)	10 mg/5 ml	3
Naloxone HCL (Narcan)	1 mg/1 ml concentration	6 mg total
Nitroglycerin	0.4 mg	1 container
Nitroglycerin topical preparation	2%	1 tube
Sodium Bicarbonate	50 mEq/50 ml	3
Versed (Midazolam)	5mg/1ml concentration	20mg total

IV Solutions:

Normal Saline	1000 ml bag	4
Normal Saline	250 ml bag	4

H. Optional Items:

Dopamine	400 mg in 250 ml D5W
Cardiac compression monitors (CPR Plus)	
Capnograph (quantitative or qualitative)	
External pacing equipment and supplies	
Lidocaine 2%Jelly - 5 ml tube	
Tympanic thermometer	
Valium Autoinjector (MMST only)	

Note: ***Pediatric required supplies denoted by italics.***

* One splint may be used for both adult & pediatric e.g. Sager Splint

** Unit may remain in service until item replaced or repaired.

Approved:

EMS Medical Director

SKILL	INDICATION	STANDING ORDER	CONTRAINDICATION	COMMENTS
Blood sampling Venous/capillary	Obtain blood sample to determine treatment.	Yes	None	Repeat BS not indicated en route if patient is improving
Broselow Tape	Determination of length for calculation of pediatric drug dosages and equipment sizes.	Yes	None	Base dosage calculation on length of child. Refer to pediatric chart for dosages (P-117). Children ≥ 37 kg. follow adult protocols and medication dosages regardless of age.
Cardioversion: synchronized	Unstable VT Unstable, unconscious SVT Unstable, unconscious Atrial fibrillation/flutter and HR ≥180	Yes	**Pediatric:** If defibrillator unable to deliver <5 J or biphasic equivalent	In addition to NTG patches, remove chest transderrmal medication patches prior to cardioversion.
	Unstable, conscious SVT Unstable, conscious Atrial Fibrillation/Flutter HR ≥180(*BHPO*)	No		
Defibrillation	VT (pulseless) VF Cardiac arrest, unmonitored	Yes	None	In addition to NTG patches, remove chest transderrmal medication patches prior to defibrillation.

Approved:

EMS Medical Director

SKILL	INDICATION	STANDING ORDERS	CONTRAINDICATIONS	COMMENTS
Dermal Medication	When route indicated.	Yes*	Profound shock, CPR, Peds	Avoid application to areas that may be used for cardioversion.
ET/ETAD Medication	When ET/ETAD route is indicated	Yes*	None	**ET**: Dilute adult dose to 10ml & peds dose to 3ml with NS. **ETAD:** Esophageal placement, via Port #1 (blue). Epinephrine 10mg diluted to 20ml volume. Tracheal placement – Medications same as ET dose via Port #2 (white).
EKG monitoring	Any situation where potential for cardiac dysrhythmia.	Yes	None	Apply monitor before moving patient with chest pain, syncope, or in arrest. Document findings on PPR and leave strip with patient.
12 lead EKG	Chest pain and/or Signs and symptoms suggestive of myocardial infarction.	Yes	None	Consider atypical presentations especially in elderly, diabetics and women. Report STEMI: ***Acute MI" or ***Acute MI Suspected" Also report Left Bundle Branch Block (LBBB), paced rhythm or SVT for exclusion from STEMI assessment Document findings on the PPR and leave EKG with patient.
End tidal CO_2 Detection Device	All intubated patients	Yes	None	Monitor continuously after ET / ETAD insertion May not detect CO2 levels in pulseless rhythms. Use Pedicap in patients <15 kgs.
Esophageal Detection Device-aspiration based	All intubated patients	Yes	Patient <20 kg	Repeat as needed to reconfirm placement. Use for both ET/ETAD.
External Cardiac Pacemaker	Unstable bradycardia with a pulse refractory to Atropine 1 mg	No	None	BHPO Document rate setting, milliamps and capture

Approved:

EMS Medical Director

SKILL	INDICATION	STANDING ORDER	CONTRAINDICATIONS	COMMENTS
Glucose Monitoring	Symptomatic ?hypoglycemia	Yes	None	Repeat BS not indicated en route if patient is improving
Injection: IM	When IM route indicated	Yes*	None	Usual site: Deltoid in patients ≥3 yo. Vastus lateralis patients <3 yo.
Injection: SC	When SC route indicated.	Yes*	None	Preferred site-fatty tissue of upper arm.
Injection: IVP	When IVP route indicated	Yes*	None	
Injection: Direct IVP	When direct IVP route indicated	Yes*	None	
Intubation- ET/Stomal	Apnea or ineffective respirations for unconscious patient or decreasing LOC. Newborn deliveries if HR<60 after 30 seconds of ventilation To replace ETAD if: • ventilations inadequate OR • need ET suction OR • need to give ET medications	Yes	? Opioid OD prior to Narcan.	3 attempts per patient SO Additional attempts *BHPO* Attempt=attempt to pass ET (not including visualizations and suctioning). Document and report SD BREATHE. Reconfirm and report $EtCO_2$ and lung sounds after each pt movement. Extubation per BHO. ET Depth Pediatrics: Age in years plus 10. When using uncuffed tube, immobilize spine.
ETAD (Combitube)	Apnea or ineffective respirations for unconscious patient or decreasing LOC.	Yes	Gag reflex present Patient <4' tall. ? Opioid OD prior to Narcan. Ingestion of caustic substances. Hx esophageal disease. Laryngectomy/Stoma	Extubate per BHO. Use Small Adult size tube for pts 4'-5'6" tall and Use Adult size for patients ≥ 5' tall. Report and document SD BREATHE and ventilation port number. Reconfirm and report EtCO2 and lung sounds after each pt movement.

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EMS Medical Director

SKILL	INDICATION	STANDING ORDER	CONTRAINDICATION	COMMENTS
Magill Forceps	Airway obstruction from foreign body with decreasing LOC/unconscious	Yes	None	
Nebulizer, oxygen powered	Respiratory distress with: • Bronchospasm • Croup-like cough • Stridor	Yes*	None	Flow rate 4- 6 L/min. via mouthpiece; 6-10 L/min. via mask/ET.
Needle Thoracostomy	Severe respiratory distress with unilateral, absent breath sounds and systolic BP <90 in intubated or positive pressure ventilated patients.	No	None	BHO Use 14g IV catheter Insert catheter into anterior axillary line 4th/5th ICS on involved side (preferred) **OR** Insert into 2nd/3rd ICS in Mid- Clavicular Line on the involved side. Tape catheter securely to chest wall and leave open to air.
Nasogastric intubation	Uncuffed intubations. Gastric distention interfering w/ ventilations	Yes	Severe facial trauma. Known esophageal disease.	
Precordial Thump	Monitored/unmonitored witnessed arrest, initial onset VF/VT	Yes	None	
Prehospital Pain Scale	All patients with a traumatic or pain-associated chief complaint	Yes	None	Assess for presence of pain and intensity
Prehospital Stroke Scale	All adult patients with suspected Stroke/CVA	Yes	None	Assess facial droop, arm drift, & speech.

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SKILLS	INDICATION	STANDING ORDER	CONTRAINDICATION	COMMENTS
Pulse Oximetry	Assess oxygenation	Yes	None	Obtain room air saturation if possible, prior to O_2 administration.
Re-Alignment of Fracture	Grossly angulated long bone fracture	Yes	None	Use unidirectional traction. Check for distal pulses prior to realignment and every 15 min. thereafter.
Removal of Impaled Object	Compromised ventilation of patient with impaled object in face/cheek or neck.	Yes	None	
Spinal Immobilization	Spinal pain of ?trauma MOI suggests ?potential spinal injury Uncuffed Intubations	Yes	None	Pregnant patients (>6mo) tilt 30 degree left lateral decubitus. Optional if **all of the following are present and documented:** <u>Adult Patient</u> 1. awake, oriented to person, place & time 2. no drug/ETOH influence 3. no pain/tenderness of neck or back upon palpation 4. no competing pain 5. cooperative <u>Pediatric Patient</u> N=no altered LOC E=evidence of obvious injury absent C=complete spontaneous ROM without pain K=kinematic (mechanism) negative
Valsalva Maneuver	SVT	Yes	None	Most effective with adequate BP D/C after 5-10 sec if no conversion
VASCULAR ACCESS External jugular	When unable to establish other peripheral IV and IV is **needed for definitive therapy ONLY.**	Yes	None	Tamponade vein at end of catheter until tubing is securely attached to cannula end.

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SKILL	INDICATION	STANDING ORDER	CONTRAINDICATIONS	COMMENTS
Extremity	Whenever IV line is needed or anticipated for definitive therapy.	Yes	None	Use extension tubing for suspected STEMI and *** Acute MI***
Indwelling Devices	Primary access site for patients with indwelling catheters **if needed for definitive therapy ONLY**	Yes	Devices without external port	Infuse at a rate to support continuous flow and prevent backflow into IV line. Needleless systems may require adaptor. Examples include Groshong, Hickman.
Intraosseous	Fluid/medication administration in acute status pediatric patient < 8 years old when unable to establish other IV.	Yes	Age ≥ 8 years Tibial fracture Vascular Disruption Prior attempt to place in target bone	Splint extremity. Observe carefully for signs of extravasation. Do not infuse into fracture site. Neonate < 28 days old BHO (<1 cm in depth). Do not use spring-loaded IO needles.
Percutaneous Dialysis Catheter Access(e.g. Vascath)	Unable to establish other peripheral IV and **IV is needed for definitive therapy ONLY.**	Yes	None	Vas Cath contains concentrated dose of Heparin which must be aspirated PRIOR to infusion. Infuse at a rate to support continuous flow and prevent backflow into IV line. Needleless systems may require adaptor.
Shunt/graft - AV (Dialysis)	Unable to establish other peripheral IV and **IV is needed for definitive therapy ONLY.**	Yes	None	Prior to access, check site for bruits and thrills. Access fistula on venous side (weaker thrill). Inflate BP cuff around IV bag to just above patient's systolic BP to maintain flow of IV. If unsuccessful, hold direct pressure over site for 10" to stop bleeding. Do not apply pressure dressing.

* When medication by that route is a SO.

Approved:

EMS Medical Director

SUBJECT: Latex-Safe Equipment List **Date: 7/1/05**

I. Authority: Health and Safety Code, Division 2.5, Section 1797.204.

II. Purpose: Identify essential equipment that must be available for use with patients identified as latex-sensitive.

III. Policy: Prehospital personnel shall be prepared to manage patients that are identified as latex-sensitive in a manner that is as latex-safe as possible. Prehospital provider agencies shall attempt, when possible, to use patient equipment that minimizes exposure to latex containing products, and shall, at a minimum, maintain the items indicated below for use with patients identified as latex-sensitive. Provider agencies shall maintain documentation demonstrating the latex-safety of the equipment listed below. ALS ambulances shall maintain the complete listing below. BLS ambulance requirements are designated "+."

A. Airway Adjuncts:	Minimum
Bag-valve-mask device with reservoir, adult and pediatric	1 each
Endotracheal Tubes: Sizes: 6, 6.5, 7, 7.5, 8, 8.5, 9	1 each
Nasal Airways **+**, Assorted Sizes	1 package
O_2 Cannula **+**	1 each
Positive Pressure Breathing Valve **+** - Mask must be latex-safe	1 each
Stylet	1 each
Suction Catheters (12, 14, 18 fr.)	1 each
Suction Catheters, Tonsil Tip **+** (Yankauer)	1 each
B. Vascular Access/Monitoring Equipment	
Armboard: Long (barrier protection acceptable)	1 each
Armboard: Short (barrier protection acceptable)	1 each
Blood Pressure Cuff **+** (barrier protection acceptable)	1 each
I.V. Administration Sets: (barrier protection acceptable)	
Macrodrip	1 each
Microdrip	1 each
IV Tourniquets	1 each
Needles: I.V. Cannula - 14 Gauge	1 each
I.V. Cannula - 16 Gauge	1 each
I.V. Cannula - 18 Gauge	1 each
I.V. Cannula - 20 Gauge	1 each
Three-Way Stopcock with extension tubing	2 each
Syringes: 1 ml, 3 ml, 5 ml, 10 ml, 20 ml	1 each
Stethoscope **+** (barrier protection acceptable)	1 each
C. Monitoring	
Defibrillator pads **+**	1 pkg
Electrodes **+**	1 box

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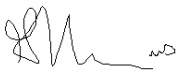

EMS Medical Director

D. Splinting Devices:

Extrication Collars **+**, Rigid, Adult	1 each
Traction Splint **+** (barrier protection acceptable)	1 each

E. Packs

	Minimum
*Personal Protective Equipment **+** (masks, gloves, gowns, shields)	2 sets

F. Other Equipment

Cold Packs **+** (barrier protection acceptable)	1 each
Hot packs **+** (barrier protection acceptable)	1 each
Nasogastric Intubation Set-Up (12 or 14, 18 fr. 48")	1 each

H. **Replaceable Medications:
Tool to remove latex caps from multi-dose vials with latex plugs

IV Solutions:

Normal Saline (barrier protection acceptable)	1000ml bag	1
Normal Saline (barrier protection acceptable)	250 ml bag	1

I. OB/Pediatric supplies

Bulb Syringe **+**	1

* Prehospital staff should minimize their own exposure to latex products at all times

** Staff shall be knowledgeable in procedures to use latex-containing products in a latex-safe manner. Such methods include:
- > barrier protective measures (for stethoscope, for example). If barrier protection is used, materials should be easily available to implement the barrier.
- > procedures to remove or cover latex-containing parts (such as the caps on multi-dose medication vials).

Note: See EMS Treatment Protocol S-122: Allergic Reaction/Anaphylaxis for additional information.

Questions regarding the management of latex-sensitive patients should be referred to the Base Hospital.

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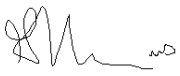

EMS Medical Director

SUBJECT: EMERGENCY MEDICAL TECHNICIAN-DEFIBRILLATION **Date: 7/1/05**
AUTOMATED EXTERNAL DEFIBRILLATOR (AED) AND
ESOPHAGEAL TRACHEAL AIRWAY DEVICE (ETAD) STANDING ORDERS

These standing orders are for cardiac arrest patients that appear to be ≥1 years of age (excluding penetrating trauma to head, neck, or trunk).

SHOCKABLE RHYTHM

1. Determine patient to be unconscious, pulseless, and with absent or agonal respirations.
2. Initiate CPR; ventilate with 100% oxygen if possible.
3. Turn on automated defibrillator (AED), attach defibrillator pads; press analyze. (Verbally record patient incident scenario as soon as possible, if recording device equipped.)
4. Allow AED to determine the underlying cardiac rhythm.
5. When the AED determines that a shock is to be delivered, defibrillate*
6. Re-analyze
7. Deliver the second and third shocks, as prompted to do so by the AED*
8. Check carotid pulse for 5-10 seconds.
9. If the victim remains pulseless after the initial series of three shocks, give four deep ventilations, insert appropriate ETAD (if patient appears to be 4 feet or taller) and perform 1 minute of CPR.
10. Check pulse
11. Reanalyze patient and continue with defibrillation and CPR in accordance with criteria established by Defibrillation Medical Director.

    A. TRANSPORTING RESPONDERS and/or ALS RENDEZVOUS:
        1. After sixth shock is delivered, prepare patient for transport to basic emergency facility (BEF) or rendezvous site.
        2. Once patient is in the rig, you may reanalyze, if indicated by "check patient" prompt. Proceed as indicated by AED. If no shock indicated, proceed with CPR and transport.
        3. While en route, if a "check patient" prompt is received, pull to side of road and analyze. Proceed as indicated by AED. **(ONE TIME ONLY)**

    B. NON-TRANSPORTING RESPONDERS:
        1. If patient persists in a shockable rhythm, continue serial administration of three (3) shocks, as per protocol, until arrival of transport unit.
        2. If patient presents with three (3) consecutive non-shockable rhythms, continue CPR and do not reanalyze unless AED prompts, "check patient".

*** SPECIFICATIONS FOR AUTOMATED EXTERNAL DEFIBRILLATORS (AED)**:

Monophasic AED's must be programmed to deliver the initial shock at 200 w/s and the second shock at 200 w/s or 300 w/s and the third and all subsequent shocks at 360 w/s.

Biphasic AED's must be programmed to deliver shocks with equivalent efficacy to shocks delivered by monophasic devices.

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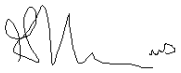

EMS Medical Director

SUBJECT: EMERGENCY MEDICAL TECHNICIAN-DEFIBRILLATION **Date: 7/1/05**
AUTOMATED EXTERNAL DEFIBRILLATOR (AED) AND
ESOPHAGEAL TRACHEAL AIRWAY DEVICE (ETAD) STANDING ORDERS

NON-SHOCKABLE RHYTHM

1. Determine patient to be unconscious, pulseless, and with absent or agonal respirations.
2. Initiate CPR; ventilate with 100% oxygen if possible.
3. Turn on AED; attach defibrillator pads; analyze (Verbally record patient incident scenario as soon as possible, if recording device equipped.
4. Allow AED to determine underlying cardiac rhythm.
5. When AED determines rhythm is non-shockable, check carotid pulse for 5-10 seconds.
6. Give four deep ventilations then insert ETAD (if patient appears 4 feet or taller).
7. If no pulse found, resume CPR for 1 minute.
8. Reanalyze.
9. If rhythm remains non-shockable, check carotid pulse for 5-10 seconds.
10 If no pulse found, resume CPR for 1 minute.
11. Reanalyze
12. If rhythm remains non-shockable, check carotid pulse for 5-10 seconds.
13. If no pulse found, resume CPR until a "check patient" message is given.
14. While doing CPR, check for a carotid pulse every 3-5 minutes.

SPECIAL CIRCUMSTANCES

1. If patient is found with agonal respirations <6/min or apnea give four deep ventilations insert ETAD (if patient appears 4 feet or taller), then:
   A. with a pulse of < or = 30bpm per minute, ventilate the patient and continue to monitor the carotid pulse. Reassess the pulse after one (1) minute. If pulse rate continues <30bpm, begin CPR and reassess pulse at one (1) minute intervals.
   B. with a pulse of >30bpm: ventilate the patient and continue to monitor carotid pulse
      1. **TRANSPORTING RESPONDERS**: prepare patient for transport and continue as above.
      2. **NON-TRANSPORTING RESPONDERS**: continue as above.

NOTE: If patient becomes pulseless, attach AED and analyze. Proceed as per shockable/non-shockable protocol.

2. For patient with return of pulse after shockable rhythm:
   A. If carotid rate is < or=30 bpm, continue to ventilate patient, perform CPR and recheck pulse rate every one (1) minute.
   B. If rate greater than 30 bpm, continue to ventilate and reassess pulse at intervals.

SHOULD A "CHECK PATIENT" PROMPT BE RECEIVED, ANALYZE AND PROCEED AS PER PROTOCOL.

NOTE:
1. Do not press "ANALYZE" in moving vehicle. If status deteriorates during transport, pull to side of road and stop ambulance. Then analyze and follow algorhythm.
2. During transport, the defibrillator should stay on to continue recording.

NOTE: Patients in cervical collar precautions, may be placed in manual traction to insert ETAD (if patient appears 4 feet or taller) and then placed back in cervical collar precautions, if difficulty in insertion exists.

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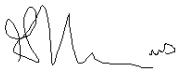

EMS Medical Director

SUBJECT: EMERGENCY MEDICAL TECHNICIAN/PUBLIC SAFETY-DEFIBRILLATION
AUTOMATIC EXTERNAL DEFIBRILLATOR (AED) STANDING ORDERS **Date: 7/1/05**

These standing orders are for cardiac arrest patients that appear to be ≥1 years of age (excluding penetrating trauma to head, neck, or trunk).

SHOCKABLE RHYTHM

1. Determine patient to be unconscious, pulseless, and with absent or agonal respirations.
2. Initiate CPR; ventilate with 100% oxygen if possible.
3. Turn on Automated External Defibrillator (AED), attach defibrillator pads; analyze. (Give patient incident scenario as soon as possible.)
4. Allow AED to determine the underlying cardiac rhythm.
5. When the AED determines that a shock is to be delivered, defibrillate*
6. Reanalyze
7. Deliver the second and third shocks, as prompted to do so by the AED*
8. Check carotid pulse for 5-10 seconds.
9. If the victim remains pulseless after the initial series of three shocks, perform 1 minute of CPR.
10. Check pulse
11. Reanalyze patient and continue with defibrillation and CPR in accordance with criteria established by Defibrillation Medical Director.

A. TRANSPORTING RESPONDERS and/or ALS RENDEZVOUS:
   1. After sixth shock is delivered, prepare patient for transport to basic emergency facility (BEF) or rendezvous site.
   2. Once patient is in the rig, you may reanalyze, if indicated by "check patient" prompt. Proceed as indicated by AED. If no shock indicated, proceed with CPR and transport.
   3. While en route, if a "check patient" prompt is received, pull to side of road and analyze. Proceed as indicated by AED. **(ONE TIME ONLY)**

B. NON-TRANSPORTING RESPONDERS:
   1. If patient persists in a shockable rhythm, continue serial administration of three (3) shocks, as per protocol, until arrival of transport unit.
   2. If patient presents with three (3) consecutive non-shockable rhythms, continue CPR and do not reanalyze unless AED prompts, "check patient".

*** SPECIFICATIONS FOR AUTOMATED EXTERNAL DEFIBRILLATORS (AED)**:

Monophasic AED's must be programmed to deliver the initial shock at 200 w/s and the second shock at 200 w/s or 300 w/s, and the third and all subsequent shocks at 360 w/s.

Biphasic AED's must be programmed to deliver shocks with equivalent efficacy to shocks delivered by monophasic devices.

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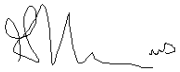

EMS Medical Director

SUBJECT: EMERGENCY MEDICAL TECHNICIAN/PUBLIC SAFETY-DEFIBRILLATION
AUTOMATIC EXTERNAL DEFIBRILLATOR (AED) STANDING ORDERS **Date: 7/1/05**

NON-SHOCKABLE RHYTHM

1. Determine patient to be unconscious, pulseless, and with absent or agonal respirations.
2. Initiate CPR; ventilate with 100% oxygen if possible.
3. Turn on AED; attach defibrillator pads; analyze (Give patient incident scenario as soon as possible.)
4. Allow AED to determine underlying cardiac rhythm.
5. When AED determines rhythm is non-shockable, check carotid pulse for 5-10 seconds.
6. If no pulse found, resume CPR for 1 minute.
7. Reanalyze
8. If rhythm remains non-shockable, check carotid pulse for 5-10 seconds.
9. If no pulse found, resume CPR for 1 minute.
10. Reanalyze
11. If rhythm remains non-shockable, check carotid pulse for 5-10 seconds.
12. If no pulse found, resume CPR until a "check patient" message is given.
13. While doing CPR, check for a carotid pulse every 3-5 minutes.

SPECIAL CIRCUMSTANCES

1. If patient is found with agonal respirations or apnea:
   A. and a pulse of < or = 30 bpm per minute, ventilate the patient and continue to monitor the carotid pulse. Reassess the pulse after one (1) minute. If pulse rate continues <30 bpm, begin CPR and reassess pulse at one (1) minute intervals.
   B. and a pulse of >30 bpm: ventilate the patient and continue to monitor carotid pulse
      1. **TRANSPORTING RESPONDERS**: prepare patient for transport and continue as above.
      2. **NON-TRANSPORTING RESPONDERS**: continue as above.

NOTE: If patient becomes pulseless, attach AED and analyze. Proceed as per shockable/non-shockable protocol.

2. For patient with return of pulse after shockable rhythm:
   A. If carotid rate is < or = 30 bpm, continue to ventilate patient, perform CPR and recheck pulse rate every one (1) minute.
   B. If rate greater than 30 bpm, continue to ventilate and reassess pulse at intervals.

SHOULD A PROMPT TO CHECK PATIENT BE RECEIVED, ANALYZE AND PROCEED AS PER PROTOCOL.

NOTE:
1. Do not press "ANALYZE" in moving vehicle. If status deteriorates during transport, pull to side of road and stop ambulance. Then analyze and follow algorhythm.
2. During transport, the defibrillator should stay on to continue recording.

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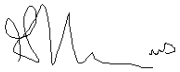

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- ALS ADULT STANDING ORDERS **Date: 7/1/06**

ADULT SKILLS

Cardioversion-Synchronized
Unstable, unconscious SVT
Unstable VT
Unstable, unconscious Atrial Fibrillation/Atrial Flutter with HR ≥180:
Start at 100 J (or clinically equivalent biphasic energy dose) MR at 200, 300, 360 J (or clinically equivalent biphasic energy dose).

Defibrillation
VT (pulseless)/ VF. Start at maximum setting (360 J monophasic or clinically equivalent biphasic energy dose) Repeat prn

Glucose Monitoring
Symptomatic ?Hypoglycemia.

Indwelling Devices
Use pre-existing external indwelling vascular access devices as primary vascular access. Use hemodialysis vascular access/fistula/graft if unable to start IV for definitive therapy purposes only.

Intubate (ET/Stomal/ETAD)
Apnea or ineffective respirations for unconscious patient or decreasing LOC.

Magill Forceps with direct Laryngoscopy
Airway obstruction from foreign body with decreasing LOC or unconscious.

Nasogastric Tube Insertion
Gastric distension interfering with ventilation.

Precordial Thump
Monitored/unmonitored witnessed arrest, initial onset VF/VT.

Re-alignment of Fracture
Grossly angulated long bone fracture with gentle unidirectional traction if necessary for splinting.

Removal of Impaled Object
Compromised ventilation of patient with impaled object in face/cheek or neck.

Valsalva Maneuver
SVT.

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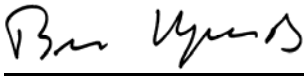

EMS Medical Director

MEDICATIONS

MEDICATION	DOSAGE / ROUTE/INDICATION
Albuterol	Respiratory distress with bronchospasm **OR** Allergic reaction in presence of respiratory distress with bronchospasm: • 6ml of 0.083% via nebulizer. MR
Adenosine	SVT with no history of bronchospasm or COPD: • 6 mg IVP followed by 20ml NS IVP • 12 mg IVP followed by 20 ml NS IVP. • If no sinus pause, MR x1 in 1-2”
ASA	Discomfort/Pain of suspected cardiac origin or discomfort/pain relieved with NTG SL (prior to arrival or EMS administered): ▪ 162mg PO
Atropine	Unstable Bradycardia with Pulse < 60: • 0.5mg IVP. MR q3-5” IVP to max 3 mg • 1mg ET. MR q3-5” to max of 6 mg administered dose Asystole/PEA rate < 60: • 1mg IVP. MR q3-5” to max of 3 mg • 2mg ET. MR q3-5” to max of 6 mg administered dose OPP: • 2mg IVP/IM or 4 mg ET MR x2 q3-5”
Atrovent	Respiratory distress with bronchospasm **OR** Allergic reaction in presence of respiratory distress with bronchospasm: • 2.5ml 0.02% via nebulizer added to **first** dose of Albuterol
Benadryl	Extrapyramidal reactions **OR** Allergic reaction/anaphylaxis • 50mg slow IVP/IM
Charcoal	Ingestions excluding isolated alcohol, heavy metal, caustic agents, hydrocarbons or iron • 50Gm PO
D_{50}	Hypoglycemia: Symptomatic patient unresponsive to oral glucose agents: D_{50} 25Gm IVP SO if BS <75mg/dl. If patient remains symptomatic and BS < 75 mg/dl MR SO
Epinephrine 1:10,000	Cardiac arrest: • 1mg IVP. MR q3-5”.
Epinephrine 1:1,000	Severe respiratory distress with bronchospasm OR Exposure to known allergen with previous severe reaction and with onset of any allergic symptoms if no known cardiac history and < 65yo **OR** Anaphylaxis (shock or cyanosis) • 0.3mg SC. MR x2 q10” Cardiac arrest: • 2mg ET MR q3-5”. • 10mg diluted to 20ml ETAD-esophageal port 1 (blue), MR q5”

MEDICATION	DOSAGE / ROUTE
Glucagon	Symptomatic patient unresponsive to oral glucose agents: **If no IV**: 1ml IM SO if BS < 75 mg/dl
Lidocaine	VF/VT pulseless: • 1.5mg/kg IVP or 3mg/kg ET MR x1 in 3-5" Stable VT **OR** Post Conversion VT/VF with pulse ≥ 60: • 1.5mg/kg IVP MR 0.5 mg/kg q8-10" to a max of 3 mg/kg **OR** • 3mg/kg ET MR 1 mg/kg q8-10" to a max of 6 mg/kg administered dose
MS	For treatment of pain score assessment of ≥ 5 with systolic BP ≥ 100 • 2-4mg IVP MR to max of 10 mg **OR** • 5mg IM **OR** • 10mg PO Discomfort/pain of suspected cardiac origin where systolic BP ≥ 100 **OR** Respiratory Distress with Rales where systolic BP ≥ 100: • 2-4 mg IVP MR to max of 10 mg
Narcan	Symptomatic ?opioid OD (excluding opioid dependent pain management patients): • 2mg IVP/direct IVP/IM. MR • 2mg IM as an additional dose if patient refuses transport Symptomatic ?opioids OD in opioid dependent pain management patients: • Narcan titrate 0.1mg increments up to 2mg IVP/direct IVP or IM
NTG SL	Discomfort/pain of cardiac origin if systolic BP ≥ 100 **OR** Respiratory distress with rales (?cardiac origin) if systolic BP **≥** 100 but <150: • 0.4mg SL MR q3-5" Respiratory distress with rales (?cardiac origin) if systolic BP **≥** 150: • 0.8mg SL MR x3 q3-5"
NTG Topical	Discomfort/pain of cardiac origin or discomfort/pain relieved with NTG SL (prior to arrival or EMS administered) if systolic BP ≥100 **OR** Respiratory distress with rales (?cardiac origin) if systolic BP ≥100: • 1" ointment
NS	Definitive therapy only: • IV, adjust prn Crush injury with extended entrapment > 2 hours of extremity or torso: • IV 1000 ml fluid bolus when extremity released ?Intra-abdominal catastrophe **OR** ?aortic aneurysm **OR** Shock: hypovolemia **OR** Shock: normovolemia (anaphylaxis, neurogenic) **OR** Trauma: • IV 500 ml fluid bolus MR to maintain systolic BP ≥ 90 Shock (?cardiac etiology, septic shock) with clear lung sounds **OR** Discomfort/pain of ?cardiac origin with associated shock with clear lung sounds **OR** Dysrhythmias with clear lung sounds: • IV 250 ml fluid bolus. MR to maintain systolic BP ≥ 90 Burns ≥ 20% 2nd or ≥ 5% 3rd degree and ≥ 15 yo

Approved:

EMS Medical Director

	• IV 500 ml fluid bolus, then TKO
Versed	Generalized seizure lasting ≥5" **OR** Focal seizure with respiratory compromise **OR** Recurrent seizure without lucid interval **OR** Eclamptic seizure: • 0.1mg/kg slow IVP, to a max dose of 5mg. MR x1 in 10" **OR** • If no IV: 0.2mg/kg IM to a max dose 10mg. MR x1 in 10" Pre-cardioversion for conscious VT: • 1-5mg slow IVP prn

Note: Maintain previously established, labeled IV solutions, medication delivery systems, and/or other treatment modalities at preset rates.

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL – ADULT STANDING ORDERS FOR COMMUNICATION FAILURE **Date: 7/1/06**

ALS

When unable to communicate with BH while at scene/enroute, IN ADDITION TO STANDING ORDERS, the following may be initiated without BH contact. **Maximum doses include standing order doses.**

PROTOCOL	CHIEF COMPLAINT and TREATMENT
Allergic Reaction/ Anaphylaxis **(S-122)**:	**Severe respiratory distress with bronchospasm OR** **Exposure to Known Allergen with previous severe reaction and with onset of any allergic symptoms (e.g. urticaria, swelling etc.)** **If KNOWN cardiac history and/or ≥ 65yo:** • Epinephrine 0.3 mg. 1:1,000 SC MR x2 q10" **Anaphylaxis (shock or cyanosis):** • Epinephrine 1:10,000 0.1mg slow IVP. MR x2 q3-5" for persisting symptoms. • Epinephrine 2 mg 1:1,000 ET MR x2 q3-5" for persisting symptoms • Dopamine 400mg/250ml at 5-40mcg/kg/min IV drip; titrate to systolic BP > 90
Altered Neurological Function **(S-123)**:	**Symptomatic ?opioids OD in opioid dependent pain management patients**: • Narcan titrate 0.1mg increments to 2mg IVP/direct IVP/IM MR
Discomfort/Pain of Suspected Cardiac Origin **(S-126)**:	If response to treatment noted, continue treatment and transport. • NTG 0.4 mg SL if systolic BP < 100 • MS 2-4 mg IV. MR to max 20 mg if systolic BP <100 **Discomfort/Pain of ?Cardiac Origin with Associated Shock:** • Dopamine 400mg/250ml at 5-40mcg/kg/min IV drip; titrate to systolic BP ≥ 90
Dysrhythmias (S-127) Unstable Bradycardia	**If rhythm refractory to Atropine 1 mg:** • External cardiac pacemaker, if available, may use • If capture occurs sedate with Versed 1-5 mg IVP • Dopamine 400mg /250cc at 5-40mcg/kg/min IV drip, titrate systolic BP=90-120 (after max Atropine or initiation of pacing)
SVT: (S-127)	**Patients with history of bronchospasm or COPD** • Adenosine 6mg rapid IVP, followed with 20ml NS IVP • Adenosine 12mg rapid IVP followed with 20ml NS IVP • If no sinus pause, MR x1 in 1-2" **If patient unstable with severe symptoms OR rhythm refractory to treatment:** **Conscious (BP<90 systolic and chest pain, dyspnea or altered LOC):** • Versed 1-5 mg slow IVP prn precardioversion. If age ≥ 60 consider lower dose with attention to age and hydration status • Synchronized cardioversion at 100 J (or clinically equivalent biphasic energy dose) MR at 200, 300, 360 J (or clinically equivalent biphasic energy dose) **Unconscious:** • Synchronized cardioversion MR prn
Unstable Atrial Fib/ Flutter (S-127)	**Unstable, Unconscious Atrial Fibrillation/ Atrial Flutter HR ≥180**: • Synchronized cardioversion MR prn
V Tach (S-127)	**Unstable with severe symptoms**: • Synchronized cardioversion MR prn
Pulseless Electrical Activity (PEA)	• $NaHCO_3$ 0.5 mEq/kg IVP, MR q10" • If no response after 3 doses of Epinephrine, d/c resuscitative efforts • If response to treatment noted, continue treatment and transport

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EMS Medical Director

SUBJECT: TREATMENT PROTOCOL – ADULT STANDING ORDERS FOR COMMUNICATION FAILURE **Date: 7/1/06**

PROTOCOL	CHIEF COMPLAINT and TREATMENT
Asystole (S-127)	• If no response after 3 doses of Epinephrine, d/c resuscitative efforts • If response to treatment noted, continue treatment and transport
Hemodialysis Patient (S-131)	**Suspected Hyperkalemia (widened QRS complex and peaked T-waves):** • $NaHCO_3$ 1mEq/kg IV push x1 • $CaCl_2$ 500mg IVP MR x1
Poisoning/OD (S-134):	**Symptomatic ?opioids OD in opioid dependent pain management patients:** • Narcan titrate 0.1mg increments up to 2mg IVP/direct IVP/IM MR **Symptomatic Organophosphate Poisoning:** • Atropine 2mg IVP/IM or 4mg ET, MR q3-5" **?Tricyclic OD with cardiac effects (e.g. hypotension, heart block, widened QRS):** • $NaHCO_3$ 1mEq/kg IVP
Pre-existing Medical Intervention (S-135)	**Previously established electrolyte and/or glucose containing IV solutions**: Adjust rate or d/c **Previously established treatment modalities:** d/c prn
Respiratory Distress (S-136)	**Respiratory Distress with Rales (? Cardiac Etiology):** Systolic BP < 100 • NTG 0.4 mg SL • Lasix 40 mg or double daily dose to maximum of 100mg IVP • MS 2-4 mg IV **Severe Respiratory Distress with Bronchospasm or inadequate response to Albuterol/Atrovent consider:** Use with caution if known cardiac history and/or ≥ 65 yo • Epinephrine 1:1,000 0.3mg SC, MR x2 q10"
Shock **(S-138)**:	**Shock Non-hypovolemic:** • Dopamine 400mg/250ml at 5-40mcg/kg/min IV drip, titrate systolic BP ≥90
Trauma **(S-139)**:	**Crush Injury with extended entrapment > 2 hours:** • $NaHCO_3$ 1mEq/kg IVP after extremity released **Severe respiratory distress with unilateral breath sounds and systolic BP <90 in intubated or positive pressure ventilated patients:** • Needle thorocostomy **Traumatic arrest:** • Consider discontinuing resuscitative measures at scene if no response and extensive transport time
Pain Management **(S-141):**	**For treatment of pain score assessment of > 5 with systolic *BP* > 100:** • MS MR 2-10mg in 2-4 mg increments IVP to max of 20mg **OR** • MS MR to max of 10mg IM **OR** • MS MR to max of 30mg PO

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EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- ALS PEDIATRIC STANDING ORDERS **Date: 7/1/05**

PEDIATRIC SKILLS

Defibrillation (monophasic/biphasic)
VF/VT (pulseless)

Glucose Monitoring
Symptomatic hypoglycemia.

Indwelling Devices
Use pre-existing external indwelling vascular access devices as primary vascular access. Use hemodialysis vascular access/fistula/graft if unable to start IV for definitive therapy purposes only.

Intraosseous Infusion: Acute status patient < 8 yo when other venous access unsuccessful.
Anaphylaxis
Dysrhythmias
Poisoning/Overdose (OPP)
Shock
Trauma

Intubate (ET/Stomal/ETAD)
Apnea or ineffective respirations for unconscious patient or decreasing LOC.
Newborn delivery when HR remains <60 bpm after 30 seconds of ventilation with 100% O_2.

Magill Forceps with Direct Laryngoscopy
Airway obstruction from foreign body with decreasing LOC or unconscious

Nasogastric Tube Insertion
Gastric distension interfering with ventilation
Uncuffed intubations

Re-alignment of Fracture
Grossly angulated long bone fracture with gentle unidirectional traction if necessary for splinting.

Removal of Impaled Object
Compromised ventilation of patient with impaled object in face/cheek or neck

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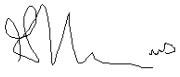

EMS Medical Director

All medications are per pediatric drug chart unless otherwise noted

MEDICATION	DOSAGE / ROUTE
Albuterol	Respiratory distress with bronchospasm **OR** Allergic reaction in presence of respiratory distress with bronchospasm ▪ Via nebulizer MR prn
Atropine	Symptomatic Organophosphate Poisoning ▪ IVP/IM/IO/ET MR x2 q3-5” Unstable bradycardia ≥ 30 days ▪ IV/IO/ET MR x1 in 5”
Atrovent	Via nebulizer added to **first** dose of Albuterol
Benadryl	Allergic reaction (may include mild hypotension) **OR** Exposure to known allergen with previous severe reaction and with onset of any allergic symptoms **OR** Anaphylaxis **OR** Extrapyramidal reaction: ▪ IM/IVP
Charcoal	Ingestions excluding isolated alcohol, heavy metal, caustic agents, hydrocarbons or iron • PO
D_{25}	Hypoglycemia: Symptomatic patient unresponsive to oral glucose agents: IVP SO if BS <75mg/dl (infant < 60mg/dl) If patient remains symptomatic and BS < 75 mg/dl (infant < 60mg/dl) MR SO
Epinephrine 1:10,000	Cardiac arrest OR Unstable bradycardia after 30 seconds of ventilation OR Newborn delivery with HR <60 after 30 seconds of CPR: ▪ IVP/IO MR x 2 q3-5”
Epinephrine 1:1000	Cardiac arrest OR Unstable bradycardia after 30 seconds of ventilation OR Newborn delivery with HR <60 after 30 seconds of CPR: ▪ ET MR x2 q3-5” diluted to 3 ml ▪ ETAD - esophageal port 1 (blue) MR x2 q5” dilute to 20 ml Severe respiratory distress with bronchospasm OR Exposure to known allergen with previous severe reaction and with onset of any allergic symptoms **OR** Anaphylaxis (shock or cyanosis): ▪ SC MR x2 q10” Respiratory distress with stridor: ▪ Via nebulizer MR x1

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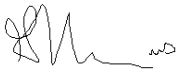

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All medications are per pediatric drug chart unless otherwise noted

MEDICATION	DOSAGE / ROUTE
Glucagon	Symptomatic patient unresponsive to oral glucose agents: **If no IV**: IM if BS < 75 mg/dl (infant <60mg/dl)
Lidocaine	VF/pulseless VT **OR** Post Conversion VF/VT with pulse ≥ 60 bpm: ▪ IVP/IO/ET MR
Morphine	For treatment of pain score assessment of ≥ 5 with systolic BP ≥ [70 +(2x age in years)]: ▪ IV/IM/PO
Narcan	Symptomatic ?opioid OD excluding opioid dependent pain management patients: ▪ Direct IVP/IV/IM. MR Symptomatic ?opioids OD in opioid dependent pain management patients: ▪ Titrate per drug chart IVP/IV/IM (dilute IV dose to 10ml with NS)
NS	Anaphylaxis **OR** Dysrthymias **OR** Noncardiogenic Shock: ▪ IV/IO fluid bolus MR to maintain systolic BP > [70 + (2x age)] if lungs clear Cardiogenic shock ▪ IV/IO fluid bolus MR x1 to maintain systolic BP > [70 + (2x age)] if lungs clear Burns ≥10% 2nd or ≥ 5% 3rd degree: ▪ 5-14 yo**:** IV 250 ml fluid bolus then TKO ▪ <5 yo**:** IV 150 ml fluid bolus then TKO
Versed	Generalized seizure lasting ≥5" **OR** Focal seizure with respiratory compromise **OR** Recurrent seizure without lucid interval: ▪ slow IVP MR x1 in 10” ▪ if no IV may give IM MR x1 in 10”

Note: Maintain previously established, labeled IV solutions, medication delivery systems, and/or other treatment modalities at preset rates.

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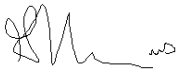

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL – PEDIATRIC STANDING ORDERS FOR COMMUNICATION FAILURE **Date: 7/1/05**

ALS

When unable to communicate with BH while at scene/enroute, IN ADDITION TO STANDING ORDERS, the following may be initiated without BH contact. **Maximum doses include standing order doses.**

All medications are per pediatric drug chart unless otherwise noted

PROTOCOL	CHIEF COMPLAINT and TREATMENT
Altered Neurological Function (S-161):	**Symptomatic ?opioids OD in opioid dependent pain management patients**: • Narcan titrate IVP/IV/IM (dilute IV dose to 10ml with NS)
Allergic Reaction/ Anaphylaxis (S-162):	**Severe respiratory distress with bronchospasm OR** **Exposure to Known Allergen with previous severe reaction and with onset of any allergic symptoms (e.g. urticaria, swelling etc.)** **Anaphylaxis (shock or cyanosis):** • Epinephrine 1:10,000 IVP/IO. MR x2 q3-5" for persisting symptoms. • Epinephrine1:1000 ET MR x2 q3-5" for persisting symptoms
Dysrhythmias (S-163): Unstable Bradycardia	• Epinephrine 1:10,000 IVP/IO MR q3-5" • OR • Epinephrine 1:1000 ET q3-5" OR • Epinephrine 1:1000 (diluted to 20ml) ETAD-esophageal via port 1 (blue) MR q5"
SVT: (S-163)	• Adenosine rapid IVP follow with 20ml NS IVP • Adenosine rapid IVP follow with 20ml NS IVP • If no sinus pause, MR x1 • Versed slow IVP prn precardioversion • Synchronized cardioversion (monophasic/biphasic) MR
VF/Pulseless VT OR Cardiac Arrest - Unmonitored (NonTraumatic) OR Activity (PEA) (S-163)	• Epinephrine 1:10,000 IVP/IO MR q3-5" **OR** • Epinephrine 1:1000 ET q3-5" **OR** • Epinephrine 1:1000 (diluted to 20ml) ETAD-esophageal via port 1 (blue) MR q5"
Asystole (S-163)	• Epinephrine 1:10,000 IVP/IO MR q3-5" **OR** • Epinephrine 1:1000 ET q3-5" OR • Epinephrine 1:1000 (diluted to 20ml) ETAD-esophageal via port 1 (blue) MR q5" • If no response after 3 doses of Epinephrine, d/c resuscitative efforts • If response to treatment noted, continue treatment and transport.
Poisoning/OD (S-165):	**Symptomatic ?opioid OD in opioid dependent pain management patients:** • Narcan titrate IVP/IV/IM (dilute IV dose with 10ml NS) **Symptomatic Organophosphate Poisoning:** • Atropine IVP/IM/IO/ET, MR q3-5" **?Tricyclic OD with cardiac effects (e.g. hypotension, heart block, widened QRS):** • NaHCO3 IVP
Trauma (S-169):	**Crush Injury with extended entrapment ≥ 2 hours of extremity or torso:** • IV Fluid bolus when extremity released • $NaHCO_3$ IVP **Severe respiratory distress with unilateral breath sounds AND BP< [70 +(2x age in years)] in intubated or positive pressure ventilated patients:** • Needle thorocostomy **Traumatic arrest:** • Consider discontinuing resuscitative measures at scene if no response and extensive transport time
Pain Management (S-173):	**For treatment of pain score assessment of > 5 with *BP* > 70+(2xage in years):** • MS MR IVP/IM/PO

Approved:

EMS Medical Director

SUBJECT: MOBILE INTENSIVE CARE UNIT INVENTORY - PEDIATRIC **Date: 7/1/05**

I. **Authority**: Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose**: Identify a minimum standardized inventory on all Mobile Intensive Care Units.

III. **Policy**: Essential equipment and supplies to be carried on each Mobile Intensive Care Unit (MICU) in San Diego County shall include all items found in the adult inventory as well as the following:

A. Essential equipment and supplies required by California Code of regulations, Title 13, Section 1103.2(a) 1-20.

B. **Pediatric Items:**

	Minimum
1. Airway:	
Bag-valve-mask device with reservoir 250ml, 500ml, 1000ml and the following interchangeable masks:	1 each
premature size	1
neonate size	1
child size	1
End Tidal CO_2 Detection Devices (<15kg, ≥15kg) **OR**	2 each
Quantitative End Tidal CO_2 Capnography (optional item)	1
ET Tubes uncuffed 2.5, 3.0, 3.5, 4.0, 4.5, 5.0	1 each
ET Tube size 5.5 cuffed if available, or uncuffed	1
Feeding tube (8 Fr.)	1
Laryngoscope – Blades curved and straight sizes 0, 1, and 2	1 each
Magill Forcep – small	1
Oral Airways 0-5	1 each
O2 Mask (non rebreather), Pediatric	1
Stylet (6F and 14F)	1 each
Suction Catheters (5,6,8,10 Fr.)	1 each
2. Birth:	
Bulb syringe	1
Head covering for newborn (or from OB pack)	1
Identification bands for mother/baby (or from OB pack)	1
Sterile Scissors (or scalpel from OB pack)	1
Umbilical Tape (or use clamp from OB pack)	1
Warm packs not to exceed 110 degrees F, or warming device with blanket Match language.	1
3. Immobilization:	
Extrication Collars, Rigid, Child (small, medium, large)	2 each
Traction Splint – Pediatric (or equivalent)	1
4. Vascular Access/Monitoring Devices:	
Defibrillation paddles (4.5.cm, 8.0 cm)	1 pair each
Gauze	1 package
IV cannula 22, 24	4 each
IO – Jamshidi-type needle – 18 Gauge	2
IO – Jamshidi-type needle – 15 Gauge	2
Three-Way Stopcock and extension tubing	2
Broselow Tape	1
Blood Pressure Cuff:	
Infant size	1
Child size	1
Pediatric Drug Chart	1

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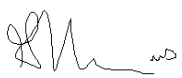

EMS Medical Director

ALS MEDICATION LIST 7/1/06

MEDICATION	INDICATIONS	PROTOCOL	COMMENTS	CONTRAINDICATIONS
ADENOSINE	SVT	S-127, S-163	BHO for patients with history of bronchospasm or COPD. Do not give third dose if patient has sinus pause following second dose.	Second or third degree AV block Sick Sinus Syndrome (without pacemaker)
ALBUTEROL	Respiratory distress with bronchospasm Allergic Reaction Burns	S-122, S-136, S-162, S-167 S-124, S-170	Inhalation continuous via O_2 powered nebulizer	
ASPIRIN	Pain/discomfort of ?cardiac origin	S-126		
ATROPINE SULPHATE	Asystole, adult PEA HR <60 after Epinephrine dose Unstable Bradycardia Organophosphate poisoning	S-127, S-134, S-150, S-163, S-165		Pediatric asystole Unstable Bradycardia <30 days
ATROVENT	Respiratory distress with bronchospasm Allergic Reaction Burns	S-122, S-136, S-162, S-167 S-124, S-170	Added to first dose of Albuterol via continuous O_2 powered nebulizer	
BENADRYL (DIPHENHYDRAMINE)	Allergic reaction Anaphylaxis Extrapyramidal reaction	S-122, S-134, S-162, S-165	IVP - administer slowly	
CALCIUM CHLORIDE	Suspected hyperkalemia in hemodialysis patient in presence of widened QRS complex and peaked T waves	S-131		

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EMS MEDICAL DIRECTOR

ALS MEDICATION LIST 7/1/06

MEDICATION	INDICATIONS	PROTOCOL	COMMENTS	CONTRAINDICATIONS
CHARCOAL (no Sorbitol)	Ingestion	S-134, S-165	Assure patient has gag reflex and is cooperative.	Isolated alcohol, heavy metal, caustic agents, hydrocarbons or iron ingestion
D_{50} (Dextrose 50%) **OR** D_{25} (Dextrose 25%) Peds	Symptomatic hypoglycemia: if BS <75mg/dl (Infant <60mg/dl)	S-123, S-161	Repeat BS not indicated en route if patient improving	
DOPAMINE HYDROCHLORIDE	Shock:normovolemia (anaphylactic, neurogenic) Shock: (?cardiac etiology, septic) Discomfort/Pain of ?cardiac origin with associated shock Unstable Bradycardia (after max Atropine or TCP)	S-138 S-122 S-126 S-127	Titrate to maintain systolic BP ≥ 90 not to exceed 120	
EPINEPHRINE	Cardiac arrest Allergic reaction Anaphylaxis Respiratory distress with bronchospasm Respiratory distress with stridor	S-127, S-163 S-122, S-162 S-136, S-167	**ETAD if ventilating via esophageal Port 1 (blue):** dilute to 20ml volume **ETAD if ventilating via tracheal Port 2 (white):** use ET doses **SC:** BHO if patient ≥ 65yo and history of known cardiac disease	
GLUCAGON	Unable to start IV in patient with symptomatic hypoglycemia if BS <75mg/dl (Infant <60mg/dl)	S-123, S-161		

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ALS MEDICATION LIST 7/1/06

MEDICATION	INDICATIONS	PROTOCOL	COMMENTS	CONTRAINDICATIONS
LASIX (FUROSEMIDE)	Respiratory distress with rales (?cardiac etiology)	S-136	*BHPO* If on Bumex give max dose of 100 mg	
LIDOCAINE (XYLOCAINE)	VT VF/ pulseless VT Post conversion from VT/VF with HR ≥ 60 bpm	S-127, S-163	Adult doses should be given in increments rounded to the nearest 20mg amount. In the presence of shock, CHF or liver disease, the repeat bolus is recommended at 10" intervals.	Second and third degree heart block and idioventricular rhythm
LIDOCAINE JELLY (2%) optional	Intubation or Nasopharyngeal airway		Apply to ET tube or nasal airway	
MORPHINE SULPHATE (MS)	Burns Envenomation injury Trauma Pain or discomfort of ?cardiac origin Respiratory distress with rales (?cardiac origin)	S-124, S-170 S-129, S-164 S-139, S-169 S-126 S-136	*BHPO* for: • Chronic pain states • Isolated head injury • Acute onset severe headache • Drug/ETOH intoxication • Multiple trauma with	

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ALS MEDICATION LIST 7/1/06

MEDICATION	INDICATIONS	PROTOCOL	COMMENTS	CONTRAINDICATIONS
			GCS <15 • Suspected active labor • Abdominal pain	
NARCAN (NALOXONE HYDROCHLORIDE)	Symptomatic ?opioid OD	S-123, S-161 S-134, S-165		
NORMAL SALINE	Definitive therapy	All	Definitive therapy defined as the administration of fluid or medications.	Rales (bolus)
NITROGLYCERINE (NTG)	Pain or discomfort of ?cardiac origin Respiratory distress with rales Fluid overload in hemodialysis patient	S-126 S-136		Suspected intracranial bleed If any patient has taken a sexual enhancement medication such as Viagra, Cialis, Levitra within 48 hours
SODIUM BICARBONATE ($NaHCO_3$)	PEA Tricyclic OD with cardiac effects Hyperkalemia in the hemodialysis patient Crush injury	S-127 S-134, S-165 S-131 S-139, S-169		
VERSED (MIDAZOLAM)	Precardioversion External Pacemaker post capture Seizure	S-127, S-163 S-123, S-133, S-161	*BHPO* precardioversion for A Fib/A Flutter and external pacemaker post capture	

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EMS MEDICAL DIRECTOR

SUBJECT: TREATMENT PROTOCOL -- **Date: 7/1/04**
PEDIATRIC WEIGHT BASED DOSAGE STANDARDS

MEDICATION	DOSE
Adenosine IV fast 1st	0.1 mg/kg
Adenosine IV fast 2nd/3rd	0.2 mg/kg
Albuterol-Nebulized	5 mg (6 ml)
Atrovent-Nebulized	0.05 mg (2.5 ml)
Atropine (Bradycardia) IV/IO	0.02 mg/kg
Atropine (OPP) IV/IM	0.02 mg/kg
Atropine ET	0.04 mg/kg
Benadryl IV/IM	1 mg/kg
Charcoal PO	1 GM/kg
Dextrose 25% IV	0.5 GM/kg (2 ml/kg)
Epinephrine IV / IO (1:10,000)	0.01 mg/kg
Epinephrine ET (1:1,000)	0.1 mg/kg
Epinephrine SQ (1:1,000)	0.01 mg/kg
Epinephrine-Nebulized (1:1,000)	2.5 – 5.0 ml
Glucagon IM	0.05 mg/kg
Lidocaine 2% IV / IO	1 mg/kg
Lidocaine 2% ET	2 mg/kg
Morphine Sulfate IV/IM	0.1 mg/kg
Morphine Sulfate PO	0.3 mg/kg
Narcan IV/DIVP/IM	0.1 mg/kg
Narcan IV titrated increments	0.1 mg/kg
Normal Saline Fluid Bolus	20 ml/kg
Sodium Bicarb IV	1 mEq/kg
Versed IV slow	0.1 mg/kg
Versed IM	0.2 mg/kg

Approved:

Broselow color: GREY/PINK

Kg range: < 8 kg Approx Kg: 5 kg

Approximate LBS:	**10 lbs**
ET tube size:	**3.5**
NG tube size:	**5 Fr**

	1st	2nd	3rd
Defib:	**10 J**	**20 J**	**20 J**
Cardiovert:	**5 J**	**10 J**	**10 J**

(or clinically equivalent biphasic energy dose)

VOL	MEDICATION	DOSE	CONCENTRATION
0.2 ml	Adenosine **IV 1st**	0.5 mg	6 mg/2 ml
0.4 ml	Adenosine IV **2nd/3rd**	1 mg	6 mg/2 ml
6 ml	Albuterol-**Nebulized**	5 mg	2.5 mg/3 ml
2.5 ml	Atrovent-**Nebulized**	0.05 mg	0.05 mg/2.5 ml
1 ml	Atropine (**Bradycardia) IV/IO**	0.1 mg	1 mg/10 ml
0.3 ml *	Atropine **(OPP) IV/IM**	0.1 mg	0.4 mg/1 ml
0.5 ml	Atropine **ET**	0.2 mg	0.4 mg/1 ml
0.1 ml	Benadryl **IV/IM**	5 mg	50 mg/1 ml
24 ml	Charcoal **PO**	5 GM	50 GM/240 ml
10 ml	Dextrose **25% IV**	2.5 GM	12.5 GM/50 ml
0.5 ml	Epinephrine **IV/IO**	0.05 mg	**1:10,000** 1mg/10ml
0.5 ml	Epinephrine **ET**	0.5 mg	**1:1,000** 1mg/1ml
0.1 ml *	Epinephrine **SC**	0.05 mg	**1:1,000** 1mg/1ml
2.5 ml	Epinephrine-**Nebulized**	2.5 mg	**1:1,000** 1mg/1ml
0.3 ml *	Glucagon **IM**	0.25 mg	1 unit (mg)/1 ml
0.3 ml *	Lidocaine **2% IV/IO**	5 mg	100 mg/5 ml
0.5 ml	Lidocaine **2% ET**	10 mg	100 mg/5 ml
NONE	Morphine Sulfate **IV/IM**	NONE	10 mg/1 ml
0.8 ml *	Morphine **PO**	1.5 mg	10 mg/5 ml
0.5 ml	Narcan **IV/DIVP/IM**	0.5 mg	1 mg/1 ml
5 ml	Narcan **IV titrated increments**	0.5 mg	Diluted to 1 mg/10 ml
100 ml	Normal Saline Fluid Bolus		Standard
5 ml	Sodium Bicarb **IV**	5 meq	1 meq/1 ml
0.1 ml	Versed **IV**	0.5 mg	5 mg/1 ml
0.2 ml	Versed **IM**	1 mg	5 mg/1 ml

- To assure accuracy be sure the designated **concentration** of medication is used.
- All pediatric ET doses are diluted with NS to achieve a minimum volume of 3 ml.

* Volume rounded for ease of administration

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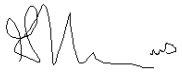


EMS Medical Director

Broselow color: RED

Broselow color: PURPLE

Broselow color: YELLOW

Kg range: 8-14kg Approx Kg: 10 kg

Approximate LBS:			**20 lbs**
ET tube size:	**3.5(R)**	**4 (P)**	**4.5(Y)**
NG tube size:	**5-8 Fr**	**8-10 Fr**	**10 Fr**

	1st	2nd	3rd
Defib:	**20 J**	**40 J**	**40 J**
Cardiovert:	**10 J**	**20 J**	**20 J**

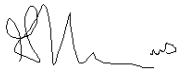
(or clinically equivalent biphasic energy dose)

VOL	MEDICATION	DOSE	CONCENTRATION
0.3 ml *	Adenosine **IV fast 1st**	1mg	6 mg/2 ml
0.7 ml *	Adenosine **IV fast 2nd/3rd**	2 mg	6 mg/2 ml
6 ml	Albuterol-**Nebulized**	5 mg	2.5 mg/3 ml
2.5 ml	Atrovent-**Nebulized**	0.05 mg	0.05 mg/2.5 ml
2 ml	Atropine **(Bradycardia) IV/IO**	0.2 mg	1 mg/10 ml
0.5 ml	Atropine **(OPP) IV/IM**	0.2 mg	0.4 mg/1 ml
1 ml	Atropine **ET**	0.4 mg	0.4 mg/1 ml
0.2 ml	Benadryl **IV/IM**	10 mg	50 mg/1 ml
50 ml *	Charcoal **PO**	10 GM	50 GM/240 ml
20 ml	Dextrose **IV 25%**	5 GM	12.5 GM/50 ml
1 ml	Epinephrine **IV/IO**	0.1 mg	**1:10,000** 1mg/10ml
1 ml	Epinephrine **ET**	1 mg	**1:1,000** 1mg/1ml
0.1 ml	Epinephrine **SQ**	0.1 mg	**1:1,000** 1mg/1ml
2.5 ml	Epinephrine-**Nebulized**	2.5 mg	**1:1,000** 1mg/1ml
0.5 ml	Glucagon **IM**	0.5 mg	1 unit (mg)/1 ml
0.5 ml	Lidocaine **2% IV/IO**	10 mg	100 mg/5 ml
1 ml	Lidocaine **2% ET**	20 mg	100 mg/5 ml
0.1 ml	Morphine Sulfate **IV/IM**	1 mg	10 mg/1 ml
1.5 ml	Morphine Sulfate **PO**	3 mg	10 mg/5 ml
1 ml	Narcan **IV/DIVP/IM**	1 mg	1 mg/1 ml
10 ml	Narcan **IV titrated increments**	1 mg	Diluted to 1 mg/10 ml
200 ml	Normal Saline Fluid Bolus		Standard
10 ml	Sodium Bicarb **IV**	10 mEq	1 meq/1 ml
0.2 ml	Versed **IV**	1 mg	5 mg/1 ml
0.4 ml	Versed **IM**	2 mg	5 mg/1 ml

- To assure accuracy be sure the designated **concentration** of medication is used.
- All pediatric ET doses are diluted with NS to achieve a minimum volume of 3 ml.

* Volume rounded for ease of administration

Approved:



EMS Medical Director

Broselow color: WHITE

Kg range:15-18kg Approx Kg:15 kg
Approximate LBS: 30 lbs
ET tube size: 5
NG tube size: 10 Fr

	1st	2nd	3rd
Defib:	**30 J**	**60 J**	**60 J**
Cardiovert:	**15 J**	**30 J**	**30 J**

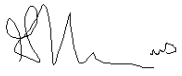
(or clinically equivalent biphasic energy dose)

VOL	MEDICATION	DOSE	CONCENTRATION
0.5 ml	Adenosine **IV fast 1st**	1.5 mg	6 mg/2 ml
1 ml	Adenosine **IV fast 2nd/3rd**	3 mg	6 mg/2 ml
6 ml	Albuterol-**Nebulized**	5 mg	2.5 mg/3 ml
2.5 ml	Atrovent-**Nebulized**	0.05 mg	0.05 mg/2.5 ml
3 ml	Atropine **(Bradycardia) IV**	0.3 mg	1 mg/10 ml
0.8 ml	Atropine **(OPP) IV/IM**	0.3 mg	0.4 mg/1 ml
1.5 ml	Atropine **ET**	0.6 mg	0.4 mg/1 ml
0.3 ml	Benadryl **IV/IM**	15 mg	50 mg/1 ml
70 ml *	Charcoal **PO**	15 GM	50 GM/240 ml
30 ml	Dextrose **25% IV**	7.5 GM	12.5 GM/50 ml
1.5 ml	Epinephrine **IV**	0.15 mg	**1:10,000** 1mg/10ml
1.5 ml	Epinephrine **ET**	1.5 mg	**1:1,000** 1mg/1ml
0.2 ml *	Epinephrine **SQ**	0.15 mg	**1:1,000** 1mg/1ml
2.5 ml	Epinephrine **Nebulized**	2.5 mg	**1:1,000** 1mg/1ml
0.8 ml *	Glucagon **IM**	0.75 mg	1 unit (mg)/1 ml
0.8 ml	Lidocaine **2% IV slow**	15 mg	100 mg/5 ml
1.5 ml	Lidocaine **2% ET**	30 mg	100 mg/5 ml
0.2 ml *	Morphine Sulfate **IV/IM**	1.5 mg	10 mg/1 ml
2.3 ml *	Morphine Sulfate **PO**	4.5 mg	10 mg/5 ml
1.5 ml	Narcan **IV/DIVP/IM**	1.5 mg	1 mg/1 ml
15 ml	Narcan **IV titrated increments**	1.5 mg	Diluted to 1 mg/10 ml
300 ml	Normal Saline Fluid Bolus		Standard
15 ml	Sodium Bicarb **IV**	15 mEq	1 meq/1 ml
0.3 ml	Versed **IV slow**	1.5 mg	5 mg/1 ml
0.6 ml	Versed **IM**	3 mg	5 mg/1 ml

- To assure accuracy be sure the designated **concentration** of medication is used.
- All pediatric ET doses are diluted with NS to achieve a minimum volume of 3 ml.

* Volume rounded for ease of administration

Approved:



EMS Medical Director

Broselow color: BLUE

Kg range:19-23kg Approx KG: 20 kg
Approximate LBS: 40 lbs
ET tube size: 5.5
NG tube size: 12-14 Fr

	1st	2nd	3rd
Defib:	**40 J**	**80 J**	**80 J**
Cardiovert:	**20 J**	**40 J**	**40 J**

(or clinically equivalent biphasic energy dose)

VOL	MEDICATION	DOSE	CONCENTRATION
0.7 ml *	Adenosine **IV fast 1st**	2 mg	6 mg/2 ml
1.3 ml *	Adenosine **IV fast 2nd/3rd**	4 mg	6 mg/2 ml
6 ml	Albuterol-**Nebulized**	5 mg	2.5 mg/3 ml
2.5 ml	Atrovent-**Nebulized**	0.05 mg	0.05 mg/2.5 ml
4 ml	Atropine **(Bradycardia) IV**	0.4 mg	1 mg/10 ml
1 ml	Atropine **(OPP) IV/IM**	0.4 mg	0.4 mg/1 ml
2 ml	Atropine **ET**	0.8 mg	0.4 mg/1 ml
0.4 ml	Benadryl **IV/IM**	20 mg	50 mg/1 ml
100 ml *	Charcoal **PO**	20 GM	50 GM/240 ml
40 ml	Dextrose **25% IV**	10 GM	12.5 GM/50 ml
2 ml	Epinephrine **IV**	0.2 mg	**1:10,000** 1mg/10ml
2 ml	Epinephrine **ET**	2 mg	**1:1,000** 1mg/1ml
0.2 ml	Epinephrine **SQ**	0.2 mg	**1:1,000** 1mg/1ml
5 ml	Epinephrine **Nebulized**	5 mg	**1:1,000** 1mg/1ml
1 ml	Glucagon **IM**	1 mg	1 unit (mg)/1 ml
1 ml	Lidocaine **2% IV slow**	20 mg	100 mg/5 ml
2 ml	Lidocaine **2% ET**	40 mg	100 mg/5 ml
0.2 ml	Morphine Sulfate **IV/IM**	2 mg	10 mg/1 ml
3 ml	Morphine Sulfate **PO**	6 mg	10 mg/5 ml
2 ml	Narcan **IV/DIVP/IM**	2 mg	1 mg/1 ml
20 ml	Narcan **IV titrated increments**	2 mg	Diluted to 1 mg/10 ml
400 ml	Normal Saline Fluid Bolus		Standard
20 ml	Sodium Bicarb **IV**	20 mEq	1 meq/1 ml
0.4 ml	Versed **IV slow**	2 mg	5 mg/1 ml
0.8 ml	Versed **IM**	4 mg	5 mg/1 ml

- To assure accuracy be sure the designated **concentration** of medication is used.
- All pediatric ET doses are diluted with NS to achieve a minimum volume of 3 ml.

* Volume rounded for ease of administration

Approved:

EMS Medical Director

Broselow color: ORANGE

Kg range: 24-29 kg Approx KG: 25 kg
Approximate LBS: 50 lbs
ET tube size: 6
NG tube size: 14-18 Fr

	1st	2nd	3rd
Defib:	**50 J**	**100 J**	**100 J**
Cardiovert:	**25 J**	**50 J**	**50 J**

(or clinically equivalent biphasic energy dose)

VOL	MEDICATION	DOSE	CONCENTRATION
0.8 ml *	Adenosine **IV fast 1st**	2.5 mg	6 mg/2 ml
1.7 ml *	Adenosine **IV fast 2nd/3rd**	5 mg	6 mg/2 ml
6 ml	Albuterol-**Nebulized**	5 mg	2.5 mg/3 ml
2.5 ml	Atrovent-**Nebulized**	0.05 mg	0.05 mg/2.5 ml
5 ml	Atropine **(Bradycardia) IV**	0.5 mg	1 mg/10 ml
1.3 ml *	Atropine **(OPP) IV/IM**	0.5 mg	0.4 mg/1 ml
2.5 ml	Atropine **ET**	1 mg	0.4 mg/1 ml
0.5 ml	Benadryl **IV/IM**	25 mg	50 mg/1 ml
120 ml	Charcoal **PO**	25 GM	50 GM/240 ml
50 ml	Dextrose **25% IV**	12.5 GM	12.5 GM/50 ml
2.5 ml	Epinephrine **IV**	0.25 mg	**1:10,000** 1mg/10ml
2.5 ml	Epinephrine **ET**	2.5 mg	**1:1,000** 1mg/1ml
10 ml	Epinephrine **ETAD (#1 tube)** Dilute with NS to 20 ml	10 mg	**1:1,000** 1mg/1ml
0.25 ml	Epinephrine **SQ**	0.25 mg	**1:1,000** 1mg/1ml
5 ml	Epinephrine **Nebulized**	5 mg	**1:1,000** 1mg/1ml
1 ml	Glucagon **IM**	1 mg	1 unit (mg)/1 ml
1.3 ml *	Lidocaine **2% IV slow**	25 mg	100 mg/5 ml
2.5 ml	Lidocaine **2% ET**	50 mg	100 mg/5 ml
0.3 ml *	Morphine Sulfate **IV/IM**	2.5 mg	10 mg/1 ml
3.8 ml *	Morphine Sulfate **PO**	7.5 mg	10 mg/5 ml
2 ml	Narcan **IV/DIVP/IM**	2 mg	1 mg/1 ml
20 ml	Narcan **IV titrated increments**	2 mg	Diluted to 1 mg/10 ml
500 ml	Normal Saline Fluid Bolus		Standard
25 ml	Sodium Bicarb **IV**	25 mEq	1 meq/1 ml
0.5 ml	Versed **IV slow**	2.5 mg	5 mg/1 ml
1 ml	Versed **IM**	5 mg	5 mg/1 ml

- To assure accuracy be sure the designated **concentration** of medication is used.
- All pediatric ET doses are diluted with NS to achieve a minimum volume of 3 ml.

* Volume rounded for ease of administration

Approved:

EMS Medical Director

Broselow color: GREEN

Kg range: 30-36kg **Approx Kg: 35 kg**
Approximate LBS: **70 lbs**
ET tube size: **6.5**
NG tube size: **18Fr**

	1st	2nd	3rd
Defib:	**70 J**	**140 J**	**140 J**
Cardiovert:	**35 J**	**70 J**	**70 J**

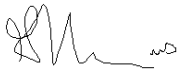
(or clinically equivalent biphasic energy dose)

VOL	MEDICATION	DOSE	CONCENTRATION
1.2 ml *	Adenosine **IV fast 1st**	3.5 mg	6 mg/2 ml
2.3 ml *	Adenosine **IV fast 2nd/3rd**	7 mg	6 mg/2 ml
6 ml	Albuterol-**Nebulized**	5 mg	2.5 mg/3 ml
2.5 ml	Atrovent-**Nebulized**	0.05 mg	0.05 mg/2.5 ml
7 ml	Atropine **(Bradycardia) IV**	0.7 mg	1 mg/10 ml
1.8 ml *	Atropine **(OPP) IV/IM**	0.7 mg	0.4 mg/1 ml
3.5 ml	Atropine **ET**	1.4 mg	0.4 mg/1 ml
0.7 ml	Benadryl **IV/IM**	35 mg	50 mg/1 ml
170 ml *	Charcoal **PO**	35 GM	50 GM/240 ml
70 ml	Dextrose **25% IV**	17.5 GM	12.5 GM/50 ml
3.5 ml	Epinephrine **IV**	0.35 mg	**1:10,000** 1mg/10ml
3.5 ml	Epinephrine **ET**	3.5 mg	**1:1,000** 1mg/1ml
10 ml	Epinephrine **ETAD (#1 tube)** Dilute with NS to 20 ml	10 mg	**1:1,000** 1mg/1ml
0.3 ml	Epinephrine **SQ**	0.3 mg	**1:1,000** 1mg/1ml
5 ml	Epinephrine **Nebulized**	5 mg	**1:1,000** 1mg/1ml
1 ml	Glucagon **IM**	1 mg	1 unit (mg)/1 ml
1.8 ml *	Lidocaine **2% IV slow**	35 mg	100 mg/5 ml
3.5 ml	Lidocaine **2% ET**	70 mg	100 mg/5 ml
0.4 ml	Morphine Sulfate **IV/IM**	3.5 mg	10 mg/1 ml
5 ml	Morphine Sulfate **PO**	10 mg	10 mg/5 ml
2 ml	Narcan **IV/DIVP/IM**	2 mg	1 mg/1 ml
20 ml	Narcan **IV titrated increments**	2 mg	Diluted to 1 mg/10 ml
500 ml	Normal Saline Fluid Bolus		Standard
35 ml	Sodium Bicarb **IV**	35 mEq	1 meq/1 ml
0.7 ml	Versed **IV slow**	3.5 mg	5 mg/1 ml
1.4 ml	Versed **IM**	7 mg	5 mg/1 ml

- To assure accuracy be sure the designated **concentration** of the medication is used.
- All pediatric ET doses are diluted with NS to achieve a minimum volume of 3 ml.

* Volume rounded for ease of administration

Approved:



EMS Medical Director

SUBJECT: TREATMENT PROTOCOL –ABDOMINAL PAIN (NON-TRAUMATIC) **Date: 7/1/05**

BLS	ALS
Ensure patent airway O_2 and/or ventilate prn NPO Anticipate vomiting	Monitor EKG/ O2 Saturation prn IV SO adjust prn For suspected intra-abdominal catastrophe or ?aortic aneurysm: IV 500 ml fluid bolus for systolic BP< 90 SO. MR to maintain systolic BP ≥ 90 SO Consider transport to facility with surgical resources immediately available

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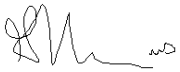


EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- AIRWAY OBSTRUCTION (Foreign Body) **Date: 7/1/06**

BLS	ALS
For a conscious patient: Reassure, encourage coughing O_2 prn Abdominal thrusts. (Chest thrusts in obesity/pregnancy) If patient becomes unconscious or is found unconscious Begin CPR Once obstruction is removed: High flow O_2, ventilate prn	**If patient becomes unconscious or has a decreasing LOC**: Direct laryngoscopy and Magill forceps SO. MR prn **Once obstruction is removed:** Monitor EKG/O_2 Saturation prn IV SO adjust prn

Note: If unable to secure airway, transport STAT while continuing abdominal thrusts.

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- ALLERGIC REACTION/ANAPHYLAXIS **Date: 7/1/05**

BLS	ALS
Ensure patent airway 0_2 and/or ventilate prn Remove stinger/injection mechanism May assist patient to self medicate own prescribed medication **ONE TIME ONLY**. Base Hospital contact required prior to any repeat dose. **Latex Sensitive Patients** Should be managed in a latex safe environment without compromising patient care. Prehospital personnel should inform the receiving facility personnel at the time of transfer if they become aware that the patient is latex sensitive. See Management of Latex Sensitive Patients (Equipment List) S-105	Monitor EKG/ O_2 Saturation prn IV SO adjust prn Benadryl 50mg slow IVP/IM SO **Any** respiratory distress with bronchospasm: Albuterol 6ml 0.083% via nebulizer SO. MR SO Atrovent 2.5ml 0.02% added to first dose of Albuterol via nebulizer SO **Severe** respiratory distress with bronchospasm **OR** **Exposure** to known allergen with previous severe reaction and onset of any allergic symptoms (e.g. urticaria, swelling etc.): ***If no known cardiac history and < 65yo:*** Epinephrine 1:1,000 0.3mg SC per SO. MR x2 q10" SO ***If KNOWN cardiac history and/or ≥ 65yo:*** Epinephrine 1:1,000 0.3mg SC per BHO. MR x2 q10" BHO **Anaphylaxis (shock or cyanosis):** Epinephrine 1:1,000 0.3 mg SC per SO. MR x2 q10" SO IV 500 ml fluid bolus for systolic BP < 90 SO. MR to maintain systolic BP ≥ 90 SO Epinephrine 1:10,000 0.1mg IVP BHO. MR x2 q3-5" BHO **OR** Epinephrine 1:1,000 2mg ET per BHO. MR x2 q3-5" BHO. Dopamine 400mg/250ml @ 5-40 mcg/kg/min IV drip. Titrate systolic BP ≥ 90 BHO

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- **Date: 7/1/06**
ALTERED NEUROLOGIC FUNCTION (NON TRAUMATIC)

BLS	ALS
Ensure patent airway, 0_2 and/or ventilate prn Spinal immobilization prn Secretion problems, position on affected side Do not allow patient to walk Restrain prn **Hypoglycemia (suspected) or known to be <75mg/dl:** If patient is awake and has gag reflex, give oral glucose tabs or paste. Patient may eat or drink if able. If patient is unconscious, NPO **CVA/Stroke:** For suspected stroke with major deficit with onset of symptoms known to be <2 hours in duration, expedite transport. Make initial notification early to confirm destination. Use the Prehospital Stroke Scale in the assessment of possible CVA patients (facial droop, arm drift and speech abnormalities). **Seizures:** Protect airway, and protect from injury Treat associated injuries **Behavioral Emergencies (S-422):** Restrain only if necessary to prevent injury, report & document distal neurovascular status q15" Avoid unnecessary sirens Consider law enforcement support	Monitor EKG/ O_2 Saturation prn IV SO adjust prn Monitor blood glucose prn SO **Symptomatic ?opioids OD (*excluding opioid dependent pain management patients*):** Narcan 2mg IVP/direct IVP/IM SO. MR SO If patient refuses transport, give additional Narcan 2 mg IM SO **Symptomatic ?opioids OD in opioid dependent pain management patients:** Narcan titrate 0.1mg increments up to 2mg IVP/direct IVP or IM SO. MR BHO **Hypoglycemia:** Symptomatic patient unresponsive to oral glucose agents: D_{50} 25Gm IVP SO if BS <75mg/dl If patient remains symptomatic and BS remains <75 mg/dl MR SO **If no IV**: Glucagon 1ml IM SO if BS < 75 mg/dl **Suspected CVA/Stroke:** Only use supplemental O2 for O2 saturation <92% **Seizures:** For: A. Ongoing generalized seizure lasting ≥5" SO B. Focal seizure with respiratory compromise SO C. Recurrent seizures without lucid interval SO D. Eclamptic seizure of any duration SO Give: Versed 0.1mg/kg slow IVP SO to a max dose of 5mg (d/c if seizure stops) SO. MR x1 in 10" SO **If no IV:** Versed 0.2mg/kg IM SO to a max dose 10mg. MR x1 in 10" SO

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- BURNS **Date: 7/1/05**

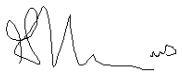
BLS	ALS
Move to a safe environment Break contact with causative agent Ensure patent airway, O_2 and/or ventilate prn Treat other life threatening injuries **Thermal burns:** Burns of < 10% body surface area, cool with non-chilled water or saline For burns ≥ 10% body surface area, cover with dry dressing and keep warm Do not allow the patient to become hypothermic **Chemical burns:** Flush with copious water Brush off dry chemicals then flush with copious amounts of water **Tar burns:** Cool with water, transport; do not remove tar	Monitor EKG/ O_2 Saturation prn IV SO adjust prn Treat pain as per Pain Management Protocol (S-141) **For patients with ≥20% 2nd or ≥5% 3rd degree burns and ≥15 yo:** IV 500 ml fluid bolus then TKO SO **In the presence of respiratory distress with bronchospasm:** Albuterol 6ml 0.083% via nebulizer SO. MR SO Atrovent 2.5ml 0.02% via nebulizer SO added to first dose of Albuterol

Note: Base Hospital Contact and Transport (Per S-415):
Will be made to UCSD Base Hospital for patients meeting burn center criteria.

BURN CENTER CRITERIA
Patients with burns involving:
- ≥ 20% 2nd or ≥ 5% 3rd degree of BSA
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet or perineum or circumferential
- significant electrical injury due to high voltage (greater than 110 volts)

Disposition:
Hyperbaric chamber for suspected CO poisoning.

Approved:



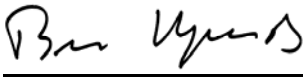
EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- **Date: 7/1/06**
DISCOMFORT/PAIN OF SUSPECTED CARDIAC ORIGIN

BLS	ALS
Ensure patent airway 0_2 and/or ventilate prn. Do not allow patient to walk If systolic BP ≥ 100, may assist patient to self medicate own prescribed medication **ONE TIME ONLY**. Base Hospital contact required prior to any repeat dose.	Monitor EKG/ O_2 Saturation prn IV SO adjust prn Obtain 12 Lead EKG ASA 162mg chewable PO SO **If systolic BP ≥ 100**: NTG 0.4mg SL SO. MR q3-5" SO NTG ointment 1" SO If NTG x 3 ineffective or contraindicated: MS 2-4 mg IVP SO. MR to max of 10mg SO. MR to max of 20 mg BHO **If systolic BP < 100**: NTG 0.4mg SL BHO. MR *BHPO* MS 2-4mg IVP BHO. MR to max of 20mg BHO **Discomfort/Pain of ? Cardiac Origin with Associated Shock:** IV 250 ml fluid bolus with clear lungs SO. MR to maintain systolic BP ≥90 SO If BP refractory to fluid boluses: Dopamine 400mg/250ml @ 5-40 mcg/kg/min IV drip. Titrate systolic BP ≥ 90 BHO

Note: If discomfort/pain relieved with NTG SL (prior to arrival or EMS administered), continue treatment with NTG ointment and ASA. ASA should be given regardless of prior daily dose(s).
If any patient has taken a sexual enhancement medication such as Viagra, Cialis, Levitra within 48 hours, NTG is contraindicated.

Approved:



EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- DYSRHYTHMIAS **Date: 7/1/06**

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	ALS
O_2 and/or ventilate prn	Monitor EKG/ O_2 Saturation prn IV 250 ml fluid bolus with clear lungs SO. MR to maintain systolic BP ≥ 90 SO A. **Unstable Bradycardia with Pulse (Systolic BP<90 and chest pain, dyspnea or altered LOC):** If bradycardia is severe and patient is unconscious, begin chest compressions Atropine 0.5 IVP for pulse <60 bpm SO. MR q3-5" to max of 3mg SO **OR** Atropine 1-mg ET for pulse <60 bpm SO. MR q3-5" to max of 6mg administered dose SO **If rhythm refractory to Atropine 1 mg:** External cardiac pacemaker, if available, may use per *BHPO* If capture occurs sedate with Versed 1-5 mg IVP *BHPO* Dopamine 400mg/250ml at 5-40mcg/kg/min IV drip, titrate to systolic BP ≥ 90 (after max Atropine or initiation of pacing) BHO B. **Supraventricular Tachycardia (SVT):** VSM SO. MR SO Adenosine 6mg rapid IVP, followed with 20ml NS IVP SO (Patients with history of bronchospasm or COPD BHO) Adenosine 12mg rapid IVP followed with 20ml NS IVP SO If no sinus pause, MR x1 in 1-2" SO **If patient unstable with severe symptoms OR rhythm refractory to treatment:** **Conscious (Systolic BP<90 and chest pain, dyspnea or altered LOC):** Versed 1-5 mg slow IVP prn precardioversion BHO If age ≥ 60 consider lower dose with attention to age and hydration status Synchronized cardioversion at 100 J (or clinically equivalent biphasic energy dose) BHO MR at 200, 300, 360 J (or clinically equivalent biphasic energy dose) BHO **Unconscious**: Synchronized cardioversion at 100 J (or clinically equivalent biphasic energy dose) SO MR at 200, 300, 360 J (or clinically equivalent biphasic energy dose) SO. MR BHO

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	ALS
O_2 and/or ventilate prn	C. **Unstable Atrial Fibrillation/ Atrial Flutter (Systolic BP<90 and chest pain, dyspnea or altered LOC):** In presence of ventricular response with heart rate ≥180: **Conscious:** Versed 1-5 mg slow IVP prn pre-cardioversion *BHPO* If age ≥ 60 consider lower dose with attention to age and hydration status Synchronized cardioversion at 100 J (or clinically equivalent biphasic energy dose) *BHPO* MR at 200, 300, 360 J (or clinically equivalent biphasic energy dose) *BHPO* **Unconscious**: Synchronized cardioversion at 100 J (or clinically equivalent biphasic energy dose) SO. MR at 200, 300, 360 J (or clinically equivalent biphasic energy) SO. MR BHO D. **Ventricular Tachycardia (VT):** Precordial thump for witnessed onset SO Lidocaine 1.5 mg/kg slow IVP SO. MR at 0.5mg/kg slow IVP q8-10" to a max of 3mg/kg (including initial bolus) SO **OR** Lidocaine 3mg/kg ET SO. MR at 1mg/kg q8-10" not to exceed 6 mg/kg administered dose (including initial bolus) SO **If patient unstable with severe symptoms:** **Conscious (Systolic BP<90 and chest pain, dyspnea or altered LOC):** Versed 1-5 mg slow IVP prn pre-cardioversion SO If age ≥ 60 consider lower dose with attention to age and hydration status Synchronized cardioversion at 100 J (or clinically equivalent biphasic energy dose) SO. MR at 200, 300, 360 J (or clinically equivalent biphasic energy dose) SO. MR BHO **Unconscious**: Synchronized cardioversion at 100 J (or clinically equivalent biphasic energy dose) SO. MR at 200, 300, 360 J (or clinically equivalent biphasic energy dose) SO. MR BHO

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	ALS
(?conscious/ pulseless): CPR AED if available, may use Assist ventilation	E. **VF/ Pulseless VT OR cardiac arrest with no monitor available:** Precordial thump for witnessed onset **UNWITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate at max setting x1 SO **WITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate at max setting x1 SO CPR x 2” Perform10 second rhythm check, and pulse check if organized rhythm Repeat cycle as indicated by rhythm Once IV is established after next rhythm/pulse check, if no pulse: Epinephrine 1:10,000 1mg IVP MR q3-5" SO **If monitor available and still in VF/VT:** Lidocaine 1.5mg/kg IVP. MR x1 in 3-5" SO Intubate SO Avoid interruption of CPR NG prn SO **If no IV established:** Epinephrine 1:1,000 2mg ET, MR q3-5"SO **OR** Epinephrine 1:1,000 10mg (dilute to 20ml) ETAD - esophageal placement via port 1 (blue) MR q5" SO Lidocaine 3mg/kg ET. MR x1 in 3-5" SO F. **Post conversion VT/VF with pulse ≥ 60 (including witnessed spontaneous conversion, precordial thump, AED & AICD). If initial dose already given, continue with repeat doses as appropriate.** Lidocaine 1.5mg/kg IVP SO. MR at 0.5mg/kg IVP q8-10", to a max of 3mg/kg (including initial bolus) SO **OR** Lidocaine 3mg/kg ET SO. MR at 1mg/kg q8-10" not to exceed 6 mg/kg administered dose (including initial bolus) SO

Note: For patients in nonperfusing rhythms after resuscitative effort:
- Consider early Base Hospital contact for disposition/pronouncement at scene
- Flush line after medication administration

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	ALS
CPR Assist ventilation	G. **Pulseless Electrical Activity (PEA)/Asystole:** CPR for 2" Epinephrine 1:10,000 1mg IVP. MR q 3-5" SO **For HR<60/min:** Atropine 1mg IVP. MR q 3-5" to max 3mg SO Intubate SO NG prn SO **If no IV established**: Epinephrine 1:1,000 2mg ET. MR q 3-5" SO **OR** Epinephrine 1:1000 10mg (dilute to 20ml) ETAD - esophageal placement via port 1 (blue). MR q5" SO. **For HR<60/min:** Atropine 2mg ET. MR q3-5" to max 6mg administered dose SO For PEA consider; $NaHCO_3$ 1mEq/kg IVP SO. MR 0.5 mEq/kg IVP q10" BHO Pronouncement at scene *BHPO* Transport per *BHPO*

Note: For patients in nonperfusing rhythms:
- Consider early Base Hospital contact for disposition/pronouncement at scene
- Flush line after medication administration

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- ENVENOMATION INJURIES **Date: 7/1/05**

BLS	ALS
O_2 and/or ventilate prn. **Jellyfish sting:** Rinse with alcohol; do not rub or apply pressure **Stingray or Sculpin injury:** Heat as tolerated **Snakebites:** Mark proximal extent of swelling Keep involved extremity at heart level and immobile	IV SO adjust prn Treat pain as per Pain Management Protocol (S-141)

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL – ENVIRONMENTAL EXPOSURE **Date: 7/1/06**

BLS	ALS
Ensure patent airway 0_2 and/or ventilate prn Remove excess/wet clothing **Heat Exhaustion:** Cool gradually Fanning, sponging with tepid water Avoid shivering If conscious, give small amounts of fluids **Heat Stroke:** Rapid cooling Ice packs to carotid, inguinal and axillary regions Sponge with tepid water Fan, avoid shivering **Cold Exposure:** Gentle warming Blankets, warm packs -not to exceed 110 F Dry dressings Avoid unnecessary movement or rubbing If alert, give warm liquids If severe, NPO Prolonged CPR may be indicated	Monitor EKG/O2 Saturation prn IV SO adjust prn **Severe Hypothermia with Cardiac Arrest:** Hold medications Continue CPR If defibrillation needed, limit to 1 shock maximum Transport

Note: Consider fluid resuscitation in young healthy adults in high heat/high exertion situations even if BP is within normal limits.

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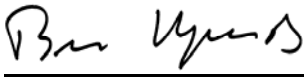

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- HEMODIALYSIS PATIENT **Date: 7/1/05**

BLS	ALS
Ensure patent airway, give O_2, ventilate if necessary	Monitor EKG/O_2 Saturation prn **FOR DEFINITIVE THERAPY ONLY:** IV access in arm that does not have graft/AV fistula SO. Adjust prn **If Unable:** Access Percutaneous Vas Catheter SO if present (aspirate 5 ml PRIOR to infusion) **OR** Access graft/AV fistula SO **Fluid overload with rales:** Treat as per S-136 **Suspected Hyperkalemia (widened QRS complex and peaked T-waves):** $NaHCO_3$ 1mEq/kg IV push x1 BHO $CaCl_2$ 500mg IVP per BHO. MR BHO

Note: Consider patient's hospital of choice for transport.
Vas Cath contains concentrated dose of Heparin which must be aspirated PRIOR to infusion.

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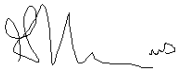

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- **Date: 7/1/05**
NEAR DROWNING/DIVING RELATED INCIDENTS

BLS	ALS
100% O_2, and/or ventilate prn Spinal immobilization when indicated	Monitor EKG/ O_2 Saturation prn IV SO adjust prn

Diving Victims: Any victim who has breathed sources of compressed air below the water's surface and presents with the following:

Minor presentation: minimal localized joint pain, mottling of the skin surface, localized swelling with pain; none of which are progressive.

Major presentation: symptoms listed above that are severe and/or rapidly progressing, vertigo, altered LOC, progressive paresthesia, paralysis, severe SOB, blurred vision, crepitus, hematemesis, hemoptysis, pneumothorax, trunk pain, or girdle or band-like burning discomfort.

Disposition of Diving Victims:

Major presentation:

All patients with a "major" presentation should be transported to UCSD-Hillcrest
Trauma issues are secondary in the presence of a "Major" presentation
If the airway is unmanageable, divert to the closest BEF

Minor presentation:

Major trauma candidate: catchment trauma center
Non-military patients: routine
Active Duty Military Personnel: transport to the Military Duty Recompression Chamber if possible. The Base Hospital will contact the Duty Recompression Chamber at (619) 556-7130 to determine chamber location. Paramedics/Base Hospital shall transfer care to Diving Medical Officer (or designee) upon arrival to chamber. Hyperbaric treatment may begin in accordance with military medical protocols.

Naval Hyperbaric Chamber Locations:
North Island Naval Air Station
Naval Station 32nd Street and Harbor Drive
Naval Special Warfare - Coronado

Note: If possible, obtain dive computer or records.
Hyperbaric Chambers must be capable of recompression to 165 ft.

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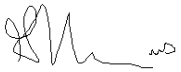

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- OBSTETRICAL EMERGENCIES **Date: 7/1/05**

BLS	ALS
MOTHER: Ensure patent airway. O_2, ventilate prn If no time for transport and delivery is imminent (crowning and pushing), proceed with delivery If no delivery, transport on left side **Routine Delivery:** Massage fundus if placenta delivered (Do not wait on scene) **Post Partum Hemorrhage:** Massage fundus vigorously Baby to breast Trendelenburg position **Eclampsia (seizures):** Protect airway, and protect from injury Spinal immobilization when indicated STAT transport for third trimester bleeding	MOTHER: IV SO adjust prn Direct to Labor/Delivery area per BHO if ≥ 20 weeks gestation. **Eclampsia (seizures):** Versed 0.1mg/kg slow IVP to a max dose of 5mg (d/c if seizure stops) SO. MR x1 in 10" SO **If no IV** Versed 0.2mg/kg IM to a max dose of 10 mg SO. MR x1 in 10" SO

Note: If time allows, place identification bands on mother and infant.

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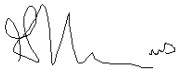

EMS Medical Director

BLS	ALS
Ensure patent airway O_2 and/or ventilate prn **Ingestions:** Identify substance Consider transport on LEFT side for ingestions **Skin:** Remove clothes Flush with copious water Brush off dry chemicals then flush with copious amounts of water **Inhalation/Smoke/Gas/Toxic Substance:** Move patient to safe environment 100% O_2 via mask Consider transport to facility with Hyperbaric chamber **?Tricyclic OD:** Hyperventilate **Contamination with commercial grade ("low level") radioactive material:** Patients with mild injuries may be decontaminated (removal of contaminated clothing, brushing off of material) prior to treatment and transport. Decontamination proceedings SHALL NOT delay treatment and transport of patients with significant or life-threatening injuries. Treatment of significant injuries is *always* the priority.	Monitor EKG/ O_2 Saturation prn IV SO adjust prn **Ingestions:** Charcoal 50 Gm PO (excluding isolated alcohol, heavy metal, caustic agents, hydrocarbons or iron ingestion) SO. Assure patient has gag reflex and is cooperative **Symptomatic ?opioid OD (*excluding opioid dependent pain management patients*):** Narcan 2mg IVP/direct IVP/IM SO. MR SO If patient refuses transport, give additional Narcan 2 mg IM SO **Symptomatic ?opioid OD in opioid dependent pain management patients:** Narcan titrate 0.1 mg up to 2mg IVP/direct IVP or IM SO. MR BHO **Symptomatic Organophosphate poisoning:** Atropine 2mg IVP/IM SO. MR x2 q3-5" SO. MR q3-5" BHO **OR** Atropine 4mg ET SO. MR x2 q3-5" SO. MR q3-5" BHO **Extrapyramidal reactions:** Benadryl 50mg slow IVP/IM SO **?Tricyclic OD with cardiac effects (e.g. hypotension, heart block, or widened QRS):** $NaHCO_3$ 1mEq/kg IVP BHO

NOTE: For scene safety, consider Haz Mat activation as needed

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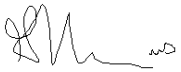

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- **Date: 7/1/05**
PRE-EXISTING MEDICAL INTERVENTIONS

BLS

Proceed with transport when person responsible for operating the device (the individual or another person) is able to continue to provide this function during transport.

Previously established electrolyte and/or glucose containing peripheral IV lines:

Maintain at preset rates
Turn off when indicated

Previously applied dermal medication delivery systems:

Remove dermal NTG when indicated (CPR, shock) SO

Previously established IV medication delivery systems and/or other preexisting treatment modalities with preset rates:

If the person responsible for operating the device is unable to continue to provide this function during transport, contact the BH for direction.

BH may ONLY direct BLS personnel to
1. Leave device as found OR turn the device off;
THEN,
2. Transport patient OR wait for ALS arrival.

Transports to another facility or to home:

No wait period is necessary for routine oral/dermal medications or completed aerosol treatments.

Check for prior IV, IM, SC, and non-routine PO medication delivery to assure minimum wait period of 30".

If there is a central line, the tip of which lies in the central circulation, the catheter MUST be capped with a device which occludes the end.

IV solutions with added medications OR other ALS treatment/monitoring modalities require ALS personnel (or RN/MD) in attendance during transport.

ALS

Previously established electrolyte and/or glucose containing IV solutions:

Adjust rate or d/c BHO

Previously applied topical medication delivery systems:

Remove dermal NTG when indicated SO
Remove other dermal medications BHO

Pre-existing external vascular access (considered to be IV TKO):

To be used for definitive therapy ONLY

Previously established and labeled IV medication delivery systems with preset rates and/or other preexisting treatment modalities:
d/c BHO

If no medication label or identification of infusing substance:
d/c SO

Note: Consider early base hospital contact.

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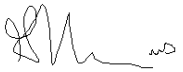

EMS Medical Director

BLS

Ensure patent airway

Reassurance

O_2 and/or ventilate prn

Hyperventilation:
Coaching/reassurance
Remove patient from causative environment. Consider underlying medical problem.

Toxic Inhalation (CO exposure, smoke gas, etc.):
Consider transport to facility with hyperbaric chamber

Known asthmatics:
Consider oral hydration

Respiratory Distress with croup-like cough:
Aerosolized saline or water 5ml via oxygen powered nebulizer/mask.
MR prn

ALS

Monitor EKG/ O_2 Saturation prn
IV SO, adjust prn
Intubate SO prn
NG prn per SO

Respiratory Distress with Rales (?cardiac origin):

NTG SL:
If systolic BP ≥ 100 but <150*:*
NTG 0.4mg SL SO. MR q3-5" SO

If systolic BP ≥ 150*:*
NTG 0.8mg SL SO. MR x3 q3-5" SO MR BHO

If systolic BP ≥ 100
NTG Ointment 1" SO

Lasix 40mg or double daily dose to maximum of 100mg IVP *BHPO*

MS 2-4 mg IVP SO. MR to max of 10mg **SO**

If systolic BP < 100:
NTG 0.4mg SL per BHO MR *BHPO*

Lasix 40mg or double daily dose to maximum of 100mg IVP *BHPO*

MS 2-4mg IVP BHO

Respiratory Distress with Bronchospasm (?respiratory etiology):
Albuterol 6ml 0.083% via nebulizer SO. MR SO
Atrovent 2.5ml 0.02% via nebulizer SO added to first dose of Albuterol

If severe respiratory distress with bronchospasm or inadequate response to Albuterol/Atrovent consider:
If no known cardiac history and < 65yo:
Epinephrine 0.3mg 1:1000 SC SO. MR x2 q10" SO
If KNOWN cardiac history and/or ≥ 65yo:
Epinephrine 0.3mg 1:1000 SC BHO. MR x2 q10" BHO

Note: If any patient has taken a sexual enhancement medication such as Viagra, Cialis, Levitra within 48 hours, NTG is contraindicated.
If patient on Bumex, give 100 mg of Lasix.

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- SEXUAL ASSAULT **Date: 7/1/05**

BLS / ALS

Ensure patent airway

0_2 and/or ventilate prn

Advise patient not to bathe or change clothes

Consult with law enforcement on scene for evidence collection

If the patient requires a medical evaluation, transport to the closest, most appropriate facility. Law enforcement will authorize and arrange an evidentiary exam after the patient is stabilized. If only evidentiary exam is needed, may release to law enforcement for transport to a SART facility.

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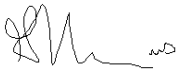

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- SHOCK **Date: 7/1/05**

BLS	ALS
Shock: O_2 and/or ventilate prn Control obvious external bleeding Treat associated injuries NPO, anticipate vomiting Shock position Remove transdermal NTG patch	Monitor EKG/ O_2 Saturation prn **Shock: Hypovolemic:** IV 500 ml fluid bolus SO. MR to maintain systolic BP ≥ 90 SO **Shock: Normovolemia (anaphylactic shock, neurogenic shock):** IV 500 ml fluid bolus SO. MR to maintain systolic BP ≥ 90 SO If BP refractory to fluid boluses: Dopamine 400mg/250ml @ 5-40 mcg/kg/min IV drip. Titrate systolic BP ≥ 90 BHO **Shock (? cardiac etiology, septic shock):** IV 250 ml fluid bolus with clear lungs SO. MR to maintain systolic BP ≥ 90 SO If BP refractory to fluid bolus: Dopamine 400mg/250ml @ 5-40 mcg/kg/min IV drip. Titrate systolic BP ≥ 90 BHO

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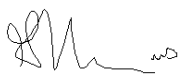

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- TRAUMA **Date: 7/1/05**

BLS	ALS
Ensure patent airway, protecting C-spine Spinal immobilization prn O_2 and/or ventilate prn Control obvious bleeding **Abdominal Trauma:** Cover eviscerated bowel with saline pads **Chest Trauma:** Cover open chest wound with three-sided occlusive dressing; release dressing if ?tension pneumothorax develops. **Extremity Trauma:** Splint neurologically stable fractures as they lie. Use traction splint as indicated. Grossly angulated long bone fractures with neurovascular compromise may be reduced with gentle unidirectional traction for splinting per BHO. **Impaled Objects:** Immobilize & leave impaled objects in place. Remove *BHPO* **Exception**: may remove impaled object in face/cheek, or from neck if there is total airway obstruction. **Neurological Trauma (head and spine injuries):** Ensure adequate oxygenation without hyperventilating patient. **Pregnancy of ≥ 6mo:** Where spinal immobilization precaution is indicated, tilt on spine board 30 degrees, left lateral decubitus. **Traumatic Arrest:** CPR. d/c *BHPO*	Monitor EKG/ O_2 Saturation prn IV SO adjust prn IV 500 ml fluid bolus SO. MR to maintain systolic BP ≥ 90 SO Treat pain as per Pain Management Protocol (S-141) Crush injury with extended entrapment ≥ 2 hours of extremity or torso: IV 1000 ml fluid bolus when extremity released SO $NaHCO_3$ 1mEq/kg IVP BHO **Grossly angulated long bone fractures** Reduce with gentle unidirectional traction for splinting SO **Impaled Objects:** Remove impaled object in face/cheek or neck if ventilation compromised SO **Severe Respiratory Distress with unilateral absent breath sounds and systolic BP < 90 in intubated or positive pressure ventilated patients:** Needle thoracostomy BHO **Traumatic Arrest:** Consider pronouncement at scene *BHPO*

TRANSPORT GUIDELINES:
Routine Disposition-Pediatric patients who meet criteria outlined in T-460 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Designated Pediatric Trauma Center, EXCEPT in the following situations:

1. **Adult + Child:**
   a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility. If both patients are critical, or if there are other questions, both may be delivered to the designated adult trauma center.
   b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to pediatric trauma facility and the adult to the catchment area trauma facility.
2. **Bypass/Diversion:** If the designated pediatric trauma center is "on bypass", pediatric trauma candidates should be delivered to UCSD.

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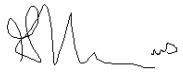

EMS Medical Director

BLS/ALS

A. One person will assume responsibility for all scene medical communication

B. Only one (1) BH will be contacted during the entire incident including during transport

C. Prehospital providers will utilize Simple Triage and Rapid Transport (START) guidelines to determine priorities of treatment and transport

D. If staffing resources are limited, CPR need not be initiated for arrest victims, however, if CPR has been initiated prior to arrival of ALS personnel or briefly during assessment, discontinue only if one of the following occurs or is present*:

1) subsequent recognition of obvious death SO
2) BHPO
3) presence of Advance Health Care Directive, DNR Form/Order or Medallion SO
4) lack of response to brief efforts in the presence of any other potentially salvageable patient requiring intervention SO

E. If a paramedic team is split, contact the BH to confirm destination prior to leaving or ASAP enroute SO
(If a paramedic team is split, each paramedic may still perform ALS duties)

F. Radio communication for multi-patient incident need only include the following on each patient:
1. patient number assignment (i.e., #1, #2 . . .)
2. age
3. sex
4. mechanism
5. chief complaint
6. abnormal findings
7. treatment initiated
8. ETA, destination, and transporting unit number

G. Radio Communication for Annex D activation need only include the following on each patient:
1. patient number if assigned (i.e., #1, #2 . . .)
2. triage category (Immediate, Delayed, Minor)
3. destination
4. transporting unit number

* Reference Policy S-402 Prehospital Determination of Death

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- PAIN MANAGEMENT **Date: 7/1/05**

BLS	ALS
Assess level of pain using standardized pain scale provided below Ice, immobilize and splint when indicated Elevation of extremity trauma when indicated	**Pain score assessment of < 5*:*** Continue to monitor and reassess pain as appropriate **For treatment of pain score assessment of ≥ 5 with *BP* ≥ 100 systolic:** MS 2-10mg in 2-4 mg increments IVP to max of 10mg SO MR to max of 20mg BHO **OR** MS 5mg IM SO. MR to max of 10mg BHO **OR** MS 10mg PO SO. MR to max of 30mg BHO *BHPO* for: • Chronic pain states • Isolated head injury • Acute onset severe headache • Drug/ETOH intoxication • Multiple trauma with GCS <15 • Suspected active labor • Abdominal pain

Note: These orders may be implemented after the paramedic assesses the level of pain and determines if patient agrees to treatment. ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.
The parenteral dose relative strength of MS is three times the oral dose of MS.

Approved:

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL NERVE AGENT **Date: 7/1/05**

BLS ALS

Only prehospital personnel who have completed County of San Diego approved training specific to the use of Atropine and 2 PAM Cl Autoinjectors are authorized to utilize this protocol.

Upon identification of a scene involving suspected or known exposure of nerve agent:
Isolate Area
Notify dispatch of possible Mass Casualty Incident with possible Nerve Agent involvement.
DO NOT ENTER AREA

If exposed:
Blot off agent
Strip off all clothing
Flush area with large amounts of water
Cover affected area

If you begin to experience signs/symptoms of nerve agent exposure:
- Increased secretions (tears, saliva, runny nose, sweating)
- Diminished vision
- SOB
- Nausea, vomiting diarrhea
- Muscle twitching/weakness

Notify the Incident Commander (or dispatch if no IC) immediately of your exposure and declare yourself a patient

Self Treat Immediately per the following Acuity Guidelines:

Potential:
No signs & symptoms
Monitor

Mild:
Miosis, rhinorrhea, increasing SOB, fasiculations, sweating
Atropine Autoinjector (or 2 mg) IM
2-PAM Cl Autoinjector (or 600 mg) IM

Triage, decontaminate and treat patient based on severity of victim SO

Potential:
No signs & symptoms
Monitor

Mild:
Miosis, rhinorrhea, increasing SOB, fasiculations, sweating
Atropine Autoinjector (or 2 mg) IM
2-PAM Cl Autoinjector (or 600 mg) IM

Moderate:
Miosis, rhinorrhea, SOB/wheezing, increased secretions, fasiculations, muscle weakness, GI effects
Atropine Autoinjector (or 2 mg) IM, MR x1 in 5-10"
2-PAM Cl Autoinjector (or 600 mg) IM, MR x1 in 5-10"
Valium Autoinjector (or 10 mg) IM*

Severe:
Unconscious, seizures, flaccid, apnea
Initial dosing:
Atropine Autoinjector (or 2 mg) IM x3 doses in succession
2-PAM Cl Autoinjector (or 600 mg) IM x3 doses in succession
Versed 10mg IM for seizure activity
O_2 /Intubate.
Ongoing treatment:
Atropine Autoinjector (or 2 mg) IM, MR q3-5" until secretions diminish
2-PAM Cl Autoinjector (or 600 mg) IM, MR x1 in 3-5"
For continuous seizure activity MR Versed 10 mg IM x1 in 10"

Pediatric doses:

Weight	Atropine	2-PAM Cl	Versed
<20kg	0.5mg	100mg	2.5mg
20-39kg	1mg	300mg	5.0mg
≥40kg	2mg	600mg	10mg

For doses less than the amount in the Autoinjector, use the medication vial and administer with a syringe.

Consider: For frail, medically compromised, hypertensive or patients with renal failure administer half doses of Atropine and 2PAM Cl

*** Valium Autoinjectors will be utilized only by MMST personnel for self-administration for seizure control. The Valium Autoinjectors will be prescribed for individual team members by the MMST Physicians.**

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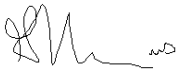

EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL -- AIRWAY OBSTRUCTION **Date: 7/1/06**

BLS	ALS
For a conscious patient: Reassure, encourage coughing O_2 prn 5 Abdominal thrusts only if complete airway obstruction. MR prn (Chest thrusts in obesity/pregnancy) If patient becomes unconscious OR is found unconscious: Begin CPR NOTE: 5 Back Blows and Chest thrusts for infants <1 year. MR prn Once obstruction is removed: High flow O_2, ventilate prn NOTE: If suspected epiglottitis: Place patient in sitting position Do not visualize the oropharynx STAT transport	**If patient becomes unconscious or has a decreasing LOC**: Direct laryngoscopy and Magill forceps SO. MR prn **Once obstruction is removed:** Monitor EKG/O_2 Saturation prn IV SO adjust prn

Note: If unable to secure airway, transport STAT while continuing CPR (unconscious patient).

Approved:

EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL -- ALTERED NEUROLOGIC FUNCTION (NON TRAUMATIC) **Date: 7/1/05**

BLS	ALS
Ensure patent airway, O_2 and/or ventilate prn. Spinal immobilization when indicated. Secretion problems, position on affected side. Do not allow patient to walk. Restrain prn. **Hypoglycemia (suspected):** If patient is awake and has gag reflex, give oral glucose paste or tabs. Patient may eat or drink if able. If patient is unconscious, NPO **Seizures:** Protect airway, and protect from injury Treat associated injuries Spinal immobilization prn If febrile, remove excess clothing/covering **Behavioral Emergencies:** Restrain only if necessary to prevent injury. Avoid unnecessary sirens Consider law enforcement support	IV SO adjust prn Monitor EKG/ O_2 Saturation /blood glucose prn **Symptomatic ?opioid OD (*excluding opioid dependent pain management patients):*** Narcan per drug chart direct IVP/IV/IM SO. MR SO **Symptomatic ? opioids OD in opioid dependent pain management patients:** Narcan titrate per drug chart IVP/IV/IM (dilute IV dose to 10ml with NS) SO. MR BHO **Hypoglycemia:** Symptomatic patient unresponsive to oral glucose agents: D_{25} per drug chart IVP SO if BS <75mg/dl (Infant <60 mg/dl) If patient remains symptomatic and BS remains <75 mg/dl (Infant <60 mg/dl) MR SO **If no IV**: Glucagon per drug chart IM SO if BS < 75 mg/dl (Infant <60 mg/dl) **Seizures:** For: A. Ongoing generalized seizure lasting ≥5" SO B. Focal seizure with respiratory compromise SO C. Recurrent seizures without lucid interval SO GIVE: Versed per drug chart slow IVP, (d/c if seizure stops) SO. MR x1 in 10" SO **If no IV** Versed per drug chart IM SO. MR x1 in 10" SO

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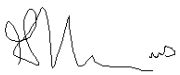

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL **Date: 7/1/05**
PEDIATRIC ALS-ALLERGIC REACTION

BLS	ALS
Ensure patent airway	Monitor EKG/ O_2 Saturation prn
0_2 and/or ventilate prn	IV SO adjust prn
Remove sting/injection mechanism	Benadryl per drug chart IVP/IM SO
May assist patient to self medicate own prescribed medication **ONE TIME ONLY**. Base Hospital contact required prior to any repeat dose. **Latex Sensitive Patients** Should be managed in a latex safe environment without compromising patient care. Prehospital personnel should inform the receiving facility personnel at the time of transfer if they become aware that the patient is latex sensitive. See Latex Safe Equipment List (S-105).	**Any** respiratory distress with bronchospasm: Albuterol per drug chart via nebulizer SO. MR SO Atrovent per drug chart added to first dose of Albuterol via nebulizer SO **Severe** respiratory distress with bronchospasm **OR** **Exposure** to known allergen with previous severe reaction and onset of any allergic symptoms (e.g. urticaria, swelling, etc.): Epinephrine 1:1,000 per drug chart SC SO. MR x2 q10" SO **Anaphylaxis (shock or cyanosis):** Epinephrine 1:1000 per drug chart SC SO. MR x2 q10" SO IV/IO fluid bolus per drug chart SO. MR to maintain systolic BP ≥ [70 + (2x age)] SO Epinephrine 1:10,000 per drug chart IVP/IO BHO. MR x2 q3-5" BHO **OR** Epinephrine 1:1000 per drug chart ET BHO. MR x2 q3-5" BHO

Approved:

EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL -- DYSRHYTHMIAS **Date: 7/1/06**

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	**ALS**
Assess level of consciousness	Monitor EKG/ O_2 Saturation prn
Determine peripheral pulses	IV/IO fluid bolus per drug chart with clear lungs SO. MR to maintain systolic BP ≥ [70 + (2x age)] SO
Ensure patent airway, ventilate prn	A. **Unstable Bradycardia:** Heart rate: Infant/Child (<9 yrs) <60 bpm Child (9-14yrs) <40bpm
If pt. ≥ 1 year, pulseless and unconscious, and AED is available, may use.	Ventilate per BVM for 30 seconds, then reassess HR prior to compressions and drug therapy.
Start CPR when heart rate indicates and patient is unstable: Heart rate: <9 yrs HR <60 bpm 9-14yrs HR <40bpm	Epinephrine 1:10,000 per drug chart IVP/IO SO. MR x2 q3-5" SO. MR q3-5" BHO **OR** Epinephrine 1:1,000 per drug chart ET SO. MR x2 q3-5" SO. MR q3-5" BHO OR Epinephrine 1:1000 per drug chart (diluted to 20ml) ETAD-esophageal via port 1 (blue) MR x2 q5" SO. MR q5" BHO
Unstable Dysrhythmia: Includes heart rate as above and any of the following: A. Poor Perfusion (cyanosis, delayed capillary refill, mottling) **OR** B. Altered LOC, Dyspnea or BP <[70+ (2 x age)] **OR** C. Diminished or Absent Peripheral Pulses	If age ≥30 days: Atropine per drug chart IV/IO/ET SO. MR x1 in 5" SO B. **Supraventricular Tachycardia** <4yrs ≥240bpm ≥4yrs ≥200bpm VSM per SO. MR SO Adenosine per drug chart rapid IVP *BHPO* follow with 20ml NS IVP Adenosine per drug chart rapid IVP *BHPO* follow with 20ml NS IVP If no sinus pause, MR x1 *BHPO*
Note: ?dehydration may cause tachycardias up to 200/min.	Versed per drug chart slow IVP prn precardioversion per *BHPO* Synchronized cardioversion per drug chart (monophasic/biphasic) *BHPO*. MR per drug chart *BHPO*

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	**ALS**
As above	C. **VF/pulseless VT or cardiac arrest with no monitor available:** **UNWITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate per drug chart (monophasic/biphasic) x1 SO **WITNESSED:** Begin CPR and continue until ready to defibrillate Defibrillate per drug chart (monophasic/biphasic) x1 SO CPR x2" Perform10 second rhythm check, and pulse check if organized rhythm Repeat cycle as indicated by rhythm Once IV/IO is established after next rhythm/pulse check, if no pulse: Epinephrine 1:10,000 per drug chart IVP/IO MR x2 q3-5" SO. MR q3-5" BHO **If monitor available and still in VF/VT:** Lidocaine per drug chart IVP/IO SO. MR x2 q3- 5" SO Intubate SO Avoid interruption of CPR NG prn SO **If no IV/IO established:** Epinephrine 1:1000 per drug chart ET, MR x2 q3-5" SO. MR q3-5" BHO **OR** Epinephrine 1:1000 per drug chart (diluted to 20ml) ETAD-esophageal via port 1 (blue) MR x2 q5" SO. MR q5" BHO Lidocaine per drug chart ET SO. MR x2 q3- 5" SO D. **Post conversion VT/VF with pulse ≥ 60 (including witnessed spontaneous conversion, precordial thump, AED & AICD). If initial dose already given, continue with repeat doses as appropriate.** Lidocaine per drug chart IVP/IO SO. MR x2 q8-10" SO **OR** Lidocaine per drug chart ET SO. MR x2 q8-10" SO E. **Pulseless Electrical Activity (PEA)/Asystole:** CPR x2" Epinephrine 1:10,000 per drug chart IVP/IO. MR x2 in q3-5" SO. MR q3-5" BHO

Approved:

EMS Medical Director

	Intubate SO NG prn SO If no IV/IO: Epinephrine 1:1000 per drug chart ET. MR x2 in q3-5" SO. MR q3-5" BHO **OR** Epinephrine 1:1000 per drug chart (diluted to 20ml) ETAD-esophageal via port 1 (blue) MR x2 q3-5" SO. MR q3-5" BHO Pronouncement at scene or transport *BHPO*

Note: For patients in nonperfusing rhythms, consider early Base Hospital contact for disposition/pronouncement at scene.
For patients in nonperfusing rhythms, flush line with NS after medication administration

Approved:

EMS Medical Director

SAN DIEGO COUNTY EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL

No. S-164
Page: 1 of 1

SUBJECT: TREATMENT PROTOCOL -- ENVENOMATION INJURIES-PEDIATRICS

Date: 7/1/05

BLS	ALS
O_2 and/or ventilate prn **Jellyfish Sting:** Rinse with alcohol; do not rub or apply pressure **Stingray or Sculpin Injury:** Heat as tolerated **Snakebites:** Mark proximal extent of swelling Keep involved extremity at heart level and immobile	IV SO adjust prn Treat pain as per Pain Management Protocol (S-173)

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway O_2 and/or ventilate prn **Ingestions:** Identify substance Consider transport LEFT side for ingestions **Skin:** Remove clothes Flush with copious water Brush off dry chemicals then flush with copious amounts of water **Inhalation of Smoke/Gas/Toxic Substance:** Move patient to safe environment 100% O2 via mask Consider transport to facility with Hyperbaric chamber **?Tricyclic OD:** Hyperventilate	Monitor EKG/ O_2 Saturation prn IV SO adjust prn **Ingestions:** Charcoal per drug chart PO SO (excluding isolated alcohol, heavy metals, hydrocarbons, caustic agents or iron ingestion). Assure child has gag reflex and is cooperative. **Symptomatic ?opioid OD (*excluding opioid dependent pain management patients):*** Narcan per drug chart direct IVP/IV/IM SO. MR SO **Symptomatic ? opioid OD in opioid dependent pain management patients:** Narcan titrate per drug chart direct IVP/IV (dilute IV dose to 10 ml with NS) or IM SO. MR BHO **Symptomatic organophosphate poisoning:** Atropine per drug chart IVP/IM/IO/ET SO. MR x2 q3-5" SO. MR q3-5" prn BHO **Extrapyramidal reactions:** Benadryl per drug chart slow IVP/IM SO **? Tricyclic OD with cardiac effects (hypotension, heart block, widened QRS):** $NaHCO_3$ per drug chart IVP x1 BHO

NOTE: For scene safety, consider Haz Mat activation as needed

Approved:

EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL -- NEWBORN DELIVERIES **Date: 7/1/05**

BLS

Suction baby's airway, first mouth, then nose, when head is delivered and prn
Ensure patent airway
O_2, ventilate 100% O2 prn
Clamp and cut cord between clamps following delivery
Keep warm and dry (wrap in warm, dry blanket)
APGAR at 1" and 5"
Document time of delivery, who cut the cord and if placenta is delivered, time of delivery.

Premature and/or Low Birth Weight Infants:
If amniotic sac intact, remove infant from sac
STAT transport
When HR <100bpm, ventilate 100% O_2
If HR <60 bpm after 30 seconds of ventilation, start CPR.
CPR need NOT be initiated if there are no signs of life AND:
a) weight <500Gm OR,
b) gestational age is <24 weeks, OR,
c) eyelids are fused closed.

Meconium delivery with respiratory distress:
Additional vigorous suctioning and BVM ventilation may be necessary.
If mechanical suction is used, keep pressure between 80 and 100cm H_20, otherwise use bulb syringe.

Cord wrapped around neck:
Slip the cord over the head and off the neck; clamp and cut the cord if wrapped too tightly.

Prolapsed cord:
Place the mother in shock position with her hips elevated on pillows, or knee chest position. Insert a gloved hand into the vagina and gently push the presenting part off the cord. TRANSPORT STAT WHILE RETAINING THIS POSITION. DO NOT REMOVE HAND UNTIL RELIEVED BY HOSPITAL PERSONNEL.

Breech Birth:
Allow infant to deliver to the waist without active assistance (support only); when legs and buttocks are delivered, the head can be assisted out. If head does not deliver within 1-2 min, insert a gloved hand into the vagina and create an airway for the infant. Transport STAT if head undelivered.

ALS

Monitor O_2 Saturation prn
Ventilate 100% O_2 if HR<100 bpm

If HR remains <60 bpm after 30 seconds of ventilation:
CPR and Intubate SO
NG prn SO

If HR remains <60 bpm after 30 seconds of CPR:
Epinephrine 1:10,000 per drug chart IVP/IO SO. MR x2 q3-5" SO. MR q3-5" BHO
OR
Epinephrine 1:1000 per drug chart ET SO. MR x2 q3-5" SO. MR q3-5" BHO

Premature and low birth weight infants:
Monitor EKG

Disposition: Direct to Labor/Delivery area per BHO.
Note: If time allows, place identification bands on mother and infant.

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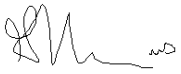

EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL -- RESPIRATORY DISTRESS **Date: 7/1/05**

BLS	ALS
Ensure patent airway Dislodge any airway obstruction Transport in position of comfort Reassurance O_2 and/or ventilate prn **Hyperventilation:** Coaching/reassurance. Remove patient from causative environment. Consider ?organic problem. **Toxic Inhalants (CO exposure, Smoke, Gas, etc.):** Move patient to safe environment 100% O2 via mask Consider transport to facility with hyperbaric chamber **Respiratory Distress with croup-like cough:** Aerosolized saline or water 5ml via oxygen powered nebulizer/mask. MR prn	Monitor EKG/ O_2 Saturation IV SO adjust prn Intubate SO prn **Respiratory Distress with Bronchospasm:** Albuterol per drug chart via nebulizer SO. MR SO Atrovent per drug chart via nebulizer SO added to first dose of Albuterol **If severe respiratory distress with bronchospasm or inadequate response to Albuterol/Atrovent consider:** Epinephrine 1:1,000 per drug chart SC SO. MR x2 q10" SO **Respiratory Distress with Stridor:** Epinephrine 1:1,000 per drug chart via nebulizer SO MR x1 SO

Note: If history suggests epiglottitis, do NOT visualize airway; utilize calming measures.

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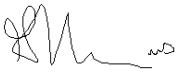

EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL -- SHOCK **Date: 7/1/05**

BLS	ALS
Ensure patent airway, 0_2 and assist ventilation Control hemorrhage Determine peripheral pulses and capillary refill Assess level of consciousness	Monitor EKG/O_2 Saturation IV/IO SO **Non cardiogenic Shock:** IV/IO fluid bolus per drug chart SO. MR to maintain systolic BP≥ [70 + (2x age)] SO if lungs clear **Cardiogenic Shock:** IV/IO fluid bolus per drug chart SO. MR x1 SO to maintain systolic BP≥ [70 + (2x age)] if lungs clear

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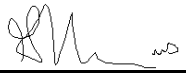

EMS Medical Director

SUBJECT: TREATMENT PROTOCOL -- TRAUMA-PEDIATRICS **Date: 7/1/05**

BLS	ALS
Ensure patent airway, protecting C-spine Spinal immobilization prn O_2 and/or ventilate prn Control obvious bleeding **Abdominal Trauma:** Cover eviscerated bowel with saline pads **Chest Trauma:** Cover open chest wound with three-sided occlusive dressing; release dressing if ?tension pneumothorax develops. **Extremity Trauma:** Splint neurologically stable fractures as they lie. Use traction splint as indicated. Grossly angulated long bone fractures with neurovascular compromise may be reduced with gentle unidirectional traction for splinting BHO. **Impaled Objects:** Immobilize & leave impaled objects in place. Remove *BHPO* **Exception**: may remove impaled object in face/cheek, or from neck if there is total airway obstruction. **Neurological Trauma (Head & Spine Injuries):** Assure adequate airway and ventilate without hyperventilation. **Traumatic Arrest:** CPR. d/c *BHPO*	Monitor EKG/ O_2 Saturation prn IV/IO SO adjust prn IV fluid bolus per drug chart for hypovolemic shock SO. MR to maintain systolic BP≥ [70 + (2x age)] SO Treat pain as per Pain Management Protocol S-173 **Crush injury** with extended entrapment ≥ 2 hours of extremity or torso: IV fluid bolus per drug chart when extremity released BHO $NaHCO_3$ drug chart IVP BHO **Extremity Trauma:** Grossly angulated long bone fractures may be reduced with gentle unidirectional traction for splinting per SO **Impaled Objects:** Remove impaled object in face/cheek or neck if ventilation compromised SO **Severe Respiratory Distress (with unilateral absent breath sounds AND BP < [70 + (2 x age)] in intubated or positive pressure ventilated patients):** Needle thoracostomy BHO **Traumatic Arrest:** Consider pronouncement at scene *BHPO*

TRANSPORT GUIDELINES:
Routine Disposition-Pediatric patients who meet criteria outlined in T-460 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Designated Pediatric Trauma Center, EXCEPT in the following situations:

1. **Adult + Child:**
   a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility. If both patients are critical, or if there are other questions, both may be delivered to the designated adult trauma center.
   b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to pediatric trauma center and the adult to the catchment area adult trauma center.

Bypass/Diversion: If the designated pediatric trauma center is "on bypass", pediatric trauma candidates should be delivered to UCSD.

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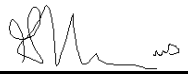


EMS Medical Director

SUBJECT: TREATMENT PROTOCOL - BURNS-PEDIATRICS **Date: 7/1/05**

BLS	ALS
Move to a safe environment Break contact with causative agent Ensure patent airway O_2 and/or ventilate prn Treat other life threatening injuries **Thermal Burns:** Burns of <10% BSA, cool with non-chilled saline or water For burns of ≥10% BSA, cover with dry dressing and keep warm Do not allow patient to become hypothermic **Chemical Burns:** Flush with copious water Brush off dry chemicals then flush with copious amounts of water **Tar Burns:** Cool with water, transport; do not remove tar.	Monitor EKG/ O_2 Saturation for significant electrical injury and prn IV SO adjust prn **For patients with ≥10% 2nd degree or ≥5% 3rd degree burns:** **5-14 yo**: IV 250 ml fluid bolus then TKO SO **<5 yo:** IV 150 ml fluid bolus then TKO SO Treat pain as per Pain Management Protocol S-173 **In the presence of respiratory distress with bronchospasm:** Albuterol per drug chart via nebulizer SO. MR SO Atrovent per drug chart via nebulizer SO added to first dose of Albuterol

Base Hospital Contact and Transport (Per S-415):
Will be made to UCSD Base Hospital for patients meeting burn center criteria:

BURN CENTER CRITERIA
Patients with burns involving:
- ≥ 10% BSA 2nd degree or ≥ 5% BSA 3rd degree
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet, perineum or circumferential
- significant electrical injury due to high voltage (greater than 110 volts)

Disposition:
Hyperbaric chamber for suspected CO poisoning

Approved:

EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL –
ALTE (Apparent Life Threatening Event) * See note **Date: 7/1/05**

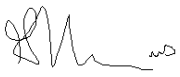
BLS	ALS
Ensure patent airway 0_2 and/or ventilate prn. If parent/guardian refuses transport: contact Base Hospital	Monitor EKG/ O_2 Saturation prn Monitor blood glucose prn Transport all cases that meet ALTE criteria to the nearest appropriate Emergency Department

Note: An Apparent Life-Threatening Event is an episode involving an infant less than 12 months of age which includes one or more of the following:

1) Apnea
2) Color change (cyanosis, pallor)
3) Marked change in muscle tone (limpness or stiffness)
4) Unresponsiveness

Most of these infants will have a normal exam in the field but many will have a serious condition that needs to be assessed by a physician. Obtain detailed description/history of the event that triggered the 9-1-1response.

Approved:



EMS Medical Director

SUBJECT: PEDIATRIC TREATMENT PROTOCOL – PAIN MANAGEMENT **Date: 7/1/05**

BLS ALS

BLS	ALS
Assess level of pain Immobilize/splint when indicated Ice/elevation when indicated	**Pain score assessment of < 5*:*** Continue to monitor and reassess pain as appropriate. **For treatment of pain score assessment of ≥ 5 with systolic *BP ≥ [70 + (2x age in years)]*:** MS IV per drug chart SO MR per drug chart BHO **OR** MS IM per drug chart SO. MR per drug chart BHO **OR** MS PO per drug chart SO. MR per drug chart BHO *BHPO* for: • Chronic pain states • Isolated head injury • Acute onset severe headache • Drug/ETOH intoxication • Multiple trauma with GCS <15 • Suspected active labor • Abdominal pain

Note: These orders may be implemented after the paramedic assesses the level of pain and determines if patient/DDM agrees to treatment.
ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.
The parenteral dose relative strength of MS is three times the oral dose of MS.

Approved:

EMS Medical Director

SUBJECT: AIR MEDICAL TREATMENT PROTOCOL –INTRODUCTION **Date: 07/01/2003**

INTRODUCTION

These Protocols define the basic and advanced life support treatment and disposition standards for Prehospital Air Medical Care in San Diego County.

1. Each Advanced Life Support Air Medical Flight Crew will consist of at a minimum, one Registered Nurse and one Physician, Registered Nurse or Emergency Medical Technician-P. Each Basic Life Support Flight Crew will consist of at a minimum one EMT-1.

2. Treatments are listed in sequential order for each condition. Adherence is recommended. All skills follow the criteria in the skills list.

3. All treatments may be performed by the Flight Nurse on standing order unless noted. Any treatment required which is not included in the protocols is at the discretion of the Flight Physician on scene or Base Hospital Physician at the assigned Base Hospital in direct radio communication providing medical direction. Orders not included in the protocols must be within the knowledge, skill, education level and scope of practice of the Flight Nurse.

4. Interfacility transport orders will be given by the physician providing medical control for the patient.

5. The Flight Paramedic will function within the scope of practice and protocols set forth by San Diego County EMT-P Protocols and Skills list and under control of the assigned Base Hospital. All treatments within the San Diego County EMT-P Protocols and Skills may be performed by the Flight Paramedic on standing order unless otherwise noted.

6. The Flight EMT-1 will function within the scope of practice and protocols set forth by San Diego County EMT-1 BLS Protocols and under the control of the assigned Base Hospital.

Approved:

EMS Medical Director

SUBJECT: ADVANCED AIR MEDICAL TREATMENT PROTOCOL -- SKILLS LIST **Date: 07/01/2003**

SKILLS LIST

SKILL	INDICATION	CONTRAINDICATION	COMMENTS
Blood sampling Venous/capillary	To obtain blood sample prior to administration of glucose product, to access blood sugar or obtain sample for law enforcement.	None	Can be obtained by direct venipuncture or through IV catheter. Refer to venous access devices.
Broselow Tape	Calculation of pediatric drug dosages.	None	Base dosage calculation on length and weight of patient. Dose may vary per protocol.
Cardioversion: synchronized	Unstable SVT	If defibrillator unable to deliver <4j//kg	Unstable=chest pain, dyspnea, systolic BP≤90mmHg or altered LOC. Start at 100ws increase to 200, 300, 360w/s as needed. Remove NTG patch prior to cardioversion.
	Unstable VT		
	Unconscious VT with BP≤80 mmHg		
	Unstable Uncontrolled Atrial Fibrillation		Ventricular response ≥180, hypotension and decreasing LOC.
Carotid Sinus Massage (CSM)	Stable SVT	None	Avoid carotid with weakened pulse. D/C after 5-10 sec if no conversion. Caution with ?CVA/TIA/elderly patients.
Chest Auscultation	All patient encounters except isolated minor extremity injuries	None	Priority in patients with SOB, chest pain, trauma, and prior to and following any medication which could affect lung sounds. Always following intubation and movement.
Chest Tube Insertion	Patients with potential or suspected pneumothorax/hemo-thorax/ tension pneumothorax	None	Insert chest tube at 4th/5th ICS anterior axillary/mid axillary line. Attach Heimlich valve for transport with drainage system prn.
Communication: Radio	Base Hospital contact	None	Modes of communication include: mobile radios, EMS radio. Must contact assigned BH for orders not within protocols for prehospital patients.
Defibrillation	VT (pulseless) VF	None	Start at 200 j. Repeat 200-300j x1, then 360j prn if no conversion.

Approved:

EMS Medical Director

SKILL	INDICATION	CONTRAINDICATIONS	COMMENTS
Dermal Medication	NTG	Profound shock, CPR, Peds	Avoid application to areas that may be used for cardioversion.
EKG monitoring	Any situation with potential for cardiac dysrhythmia.	None	Apply monitor before moving patient with chest pain, syncope, or in arrest when possible and document strip on record.
12 lead EKG (optional)	Signs and symptoms of pain/discomfort of ?cardiac origin .	None	Consider thrombolytic checklist. Document strip on record.
End Tidal CO_2 Detection Device	ET Intubation	None	Monitor after ET insertion and after each time pt is moved. Less accurate in pulseless rhythms.
Esophageal Detection Device-aspiration based (Toomey syringe or bulb device)	After intubation and for reconfirmation of placement.	None	Repeat as needed to reconfirm placement. Use for both ET tube and Combitube.
External Pacing	Symptomatic bradycardia, heart block.	None	Document rate, MA and capture.
Glucose Monitoring	Evaluate blood glucose level in diabetics, OD, seizure, altered LOC, ?CVA, behavioral patients.	None	Follow monitor instructions exactly.
Injection: IM	When IM route indicated.	None	Usual site deltoid Vastus lateralis preferred in infants.
Intubation- ET/Stomal	Apnea or ineffective respirations for unconscious patient or decreasing LOC, or newborn deliveries as indicated. Consider RSI as indicated. Replace Combitube with ET only if: ventilations inadequate, need ET suction or need to give ET medications.	Prior to Narcan in symptomatic ?OD	Must not interrupt ventilations for more than 30 sec. Use Broselow Tape recommendations for uncuffed tube on peds and immobilize spine. Newborn ventilate if HR<100, if HR still low after 1" of ventilation, intubate. Auscultate both lung fields. Document SDBREATHE Reconfirm placement of tube after each patient movement

Approved:

EMS Medical Director

SUBJECT: ADVANCED AIR MEDICAL TREATMENT PROTOCOL -- SKILLS LIST **Date: 07/01/2003**

SKILL	INDICATION	CONTRAINDICATIONS	COMMENTS
Combitube	Unable to intubate w/ ET	Gag reflex present. Patients < 4" tall. Narcotic OD prior to Narcan. Ingestion of caustic substance. Hx of esophageal disease.	Head in neutral position. Use SA size tube in patients 4 - 5'6" tall. Use regular size > 5' tall. (Note height overlap) Document BART. Reconfirm tube placement with each patient movement.
Magill forceps	Airway obstruction from foreign body with decreasing LOC or unconsciousness.	None	Once object removed, give high flow O_2 If unsuccessful consider cricothyrotomy
Needle Cricothyrotomy	Airway obstruction	None	Attempt to remove foreign body prior to attempting procedure.
Needle Thoracostomy	Signs and symptoms of tension pneumothorax - may include severe respiratory distress, cyanosis, absent breath sounds, hypotension	None	Use 12, 14g, 16 or 18g IV catheter 2-5" long into 4^{th} or 5^{th} ICS in anterior axillary line, on involved side. If lateral chest wall is inaccessible, use 2^{nd} /3^{rd} ICS midclavicular line on involved side. Tape catheter hub securely to chest wall & attach to one-way valve.
NG/OG tube	Uncuffed intubations, near drowning, newborn or any CPR when gastric distention interferes w/respirations.	Severe facial trauma. Known esophageal disease	Caution w/unconscious pt w/o gag reflex.
O_2 Powered Nebulizer	Administration of Albuterol/Atrovent for bronchospasm or Epinephrine for croup-like cough.	None	Flow rate 6 l/min. Do not use w/ humidifier.

Approved:

EMS Medical Director

SUBJECT: ADVANCED AIR MEDICAL TREATMENT PROTOCOL -- SKILLS LIST **Date: 07/01/2003**

SKILL	INDICATION	CONTRAINDICATIONS	COMMENTS
Pericardio-centesis	Signs and symptoms of cardiac tamponade	None	Insert to L of costal margin and xiphoid. Insert catheter with 25cc syringe attached bevel up 1cm left of xiphoid tip. Direct catheter toward toward L scapula. Maintain negative pressure on syringe. When fluid encountered, aspiration of minimal fluid may result in improvement. Remove stylet and attach stopcock and stabilize. Re-aspirate as needed.
Precordial thump	Witnessed arrest	Immediate availability of defibrillator.	Quickly strike patient's sternum with closed fist
Prehospital Pain Scale	All patients with a traumatic or pain-related chief complaint	None	Assess for presence and intensity
Prehospital Stroke Scale	All adult patients with suspected Stroke/CVA	None	Assess facial droop, arm drift and speech
Pulse Oximetry	Monitor patients to assess oxygenation.	None	Unreliable in CO poisoning, poor perfusion states or anemia.
Rapid Sequence Intubation	Compromised airway in patients with gag reflex, clenched jaw, combativeness or with GCS of 8 or less.	None	Preoxygenate prior to attempt. Consider premedication with Lidocaine. Administer Etomidate for sedation Administer Atropine to infants and children May hold for relative tachycardia. Administer Succinylcholine as paralytic agent. Attempt oral intubation. If unsuccessful attempt combitube or cricothyrotomy Verify placement of tube. Administer Versed for sedation-may hold for hypotension. Consider MS for pain Consider long acting paralytic post intubation.
Restraints	Threat of harm to self/others	None	Document circulation distally every 15min. Consider chemical restraint. If patient uncontrollable or a risk to flight crew consider ground transport. See Policy S-422

Approved:

EMS Medical Director

SKILL	INDICATION	CONTRAINDICATION	COMMENTS
Spinal Immobilization	Spinal pain of ?trauma, MOI suggests ?spinal injury Intubated infants and children	None	Equipment that limits spinal movement. Pregnant patients (>6mo) tilt 30 degrees left lateral decubitus.
Splinting	Grossly angulated fractures, for transport	None	Use unidirectional traction. Check for distal pulses prior to and q15".
Suction: Oral- endotracheal	When secretions impair ventilation	None	Monitor for dysrhythmias
	Prior to spontaneous breathing of newborn	Spontaneous breathing	Suction mouth w/bulb syringe as head being delivered. Clamp cord only after suctioning.
Surgical Cricothyrotomy	Airway obstruction or facial trauma when oral intubation unavailable/unsuccessful	<12 yo	Stabilize trachea, incise skin 1" with scalpel. Consider use of tracheal hook. Incise cricothyroid membrane and dilate. Insert trach or ET tube. Ventilate. Stabilize and secure. Recheck breath sounds. Alternately may use Melker Kit as instructed.
Vascular Access Devices: Indwelling Catheter	Primary venous site for patients with indwelling catheters. Use for definitive therapy ONLY	Devices without external ports	Clear air carefully to avoid embolism. Aspirate and discard 5ml of blood prior to first use. Blood return will not be possible in one-way valve-catheters. Needleless systems may require adaptor.
Central: Femoral Subclavian	When a peripheral line or external jugular line cannot be established and venous access is needed.	None	
External jugular	When unable to establish other peripheral IV and venous access is needed.	None	Tamponade vein at end of catheter until tubing is securely attached to cannula end.
Extremity	Whenever venous access indicated.	None	Watch IV rate closely. Monitor lung sounds with fluid challenges.

Approved:

EMS Medical Director

SKILL	INDICATION	CONTRAINDICATION	COMMENTS
Vascular Access (cont) Intraosseous infusion device	Fluid/medication administration in critical patient when other venous access unsuccessful.	Fractured bone	Splint extremity. Observe for signs of extravasation. Don't insert into fracture site
Percutaneous dialysis catheter access (e.g. Vascath)	Unable to start IV elsewhere when needed for administration of fluid/medications. For life threatening definitive therapy ONLY	None	Infuse at a rate to support continuous flow and prevent backflow into IV line. Needleless systems may require adaptor. Aspirate and discard 5 mls of blood prior to first use.
Vital signs: Routine	All patient assessments	None	Palpate BP only when NIBP or auscultation not possible.
Orthostatic	Medical chief complaint Suggestive of hypovolemia		Must obtain systolic and diastolic BP in supine and standing position. Take BP and P in supine position, have patients sit up and repeat BP and P; Suggestive findings of ? hypovolemia are: 1. Decrease in diastolic pressure And/or 2. Increased HR And/or 3. Dizziness/lightheadedness. If patient becomes dizzy, lay patient down and do not complete orthostatic VS check.

Approved:

EMS Medical Director

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
ADENOSINE	SVT	6mg rapid IVP follow with 20ml NS. Then 12mg rapid IVP follow with 20ml NS, MR X 1.	Use with extreme caution in patients with history of bronchospasm or COPD. Administer rapid IVP	Second or third degree AV block Sick Sinus Syndrome (without pacemaker)
ALBUTEROL	Respiratory distress with bronchospasm Allergic Reaction Burns	6ml 0.83% via nebulizer. MR as necessary.	Inhalation continuous via O_2 powered nebulizer	
AMIODARONE	Stable VT Unstable VT/Pulseless VT/VF	150 mg over 10 minutes MR X 1 in 10 minutes 300mg, followed prn by 150 mg over 10 minutes.	**Consider** Amiodarone Drip 0.5 –1 mg per minute **post conversion** rhythm converts after Amiodarone.	
APRESOLINE	Pregnancy Induced Hypertension	5mg IV over 10" MR x 2 q 20" Titrate to BP diastolic = 90-100mmHg.		Coronary artery disease Mitral valve disease
ASPIRIN	Pain of ? cardiac origin	324mg chewable PO		Hypersensitivity
ATIVAN	Altered Neurologic Function-Seizures Behavioral Emergencies Envnomation Injuries Obstetrical Emergencies--Seizures	1-2 mg IV/IM MR to a max of 4 mg		

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
ATROPINE SULFATE	Asystole PEA HR <60 after Epinephrine dose Unstable Bradycardia HR<40 Ventricular Ectopy in the presence of Bradycardia Organophosphate poisoning RSI Associated bradycardia	1mg IVP **OR** 2mg ET (max 3mg absorbed dose) 0.5-1 mg IVP **OR** 1-2 mg ET max 3 mg absorbed dose 2 mg IV, IN MR q 1 minute prn **OR** 4 mg ET 0.01 mg/kg IVP/IM (0.1 mg minimum dose)		
ATROVENT	Respiratory Distress with Bronchospasm Severe Respiratory Distress with Bronchospasm Allergic reaction Burns	2.5ml 0.02% via nebulizer	Added to first dose of albuterol via continuous O_2 powered nebulizer	
BENADRYL (DIPHENHYDRAMINE)	Allergic reaction Anaphylaxis Extrapyramidal reaction	50mg IVP 50mg IM	IVP - administer slowly	
CALCIUM GLUCONATE	Suspected hyperkalemia in hemodialysis patient in presence of widened QRS complex and peaked T waves Symptomatic Black Widow Spider Bites	10 ml IVP (4.6 mEq) 10 ml IVP (4.6 mEq)		

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
CHARCOAL-ACTIVATED (no Sorbitol)	Ingestion	50GM PO	Charcoal is ineffective with alcohol, heavy metal, lithium and iron	Iron ingestion No gag reflex, decreased LOC, or uncooperative.
D_{50} (Dextrose 50%)	Symptomatic hypoglycemia in **known** diabetic: if BS <75mg/dl if BS unobtainable Symptomatic hypoglycemia in **unknown** diabetic: if BS <75mg/dl	25GM IVP, MR prn		
DOPAMINE HYDROCHLORIDE	Shock in presence of normovolemia Discomfort/Pain of ?cardiac origin with associated shock Anaphylaxis Bradycardia (after max Atropine)	400mg/250ml @ 5-40mcg/kg/min IV drip. Titrate BP=100-120mmHg systolic		
EPINEPHRINE	Pulseless rhythms _____ Allergic reaction _____ Respiratory Distress with Bronchospasm _____ Anaphylaxis	1:10,000 1mg IVP, MR q 3-5" **OR** 1:1,000 2mg ET, MR q 3-5" **OR** 1:1,000 10mg ETAD, MR q 3-5" _____ 1:1000 0.3mg SC, MR q 10" X2 (total 3 doses. _____ 1:1000 0.3 mg SC MR in 10 minutes _____ 1:10000 0.1-0.3 mg IVP MR q 10" to max of 0.5 mg	**SC:** Use with caution if patient ≥55yo and history of known cardiac disease	

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
EPINEPHRINE DRIP	Bradycardia with hypotension	1:1000 1 mg/250 mls NS @ 2-10 mcg/min.	Titrate to effect	
ETOMIDATE	To facilitate endotracheal intubation	20mg IVP Adult		
GLUCAGON	Unable to start IV in patient with symptomatic hypoglycemia in **known** diabetic: if BS <75mg/dl if BS unobtainable Unable to start IV in patient with symptomatic hypoglycemia in **unknown** diabetic: if BS <75mg/dl	1unit (1ml) IM		
INTRAVENOUS SOLUTIONS NORMAL SALINE (NS) **OR** DEXTROSE 5% WATER (D5W)	Definitive therapy or need anticipated	TKO IV drip, adjust per protocol		

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
LASIX (FUROSEMIDE)	Respiratory distress with rales with?cardiac etiology	20-100mg IVP		
LABETOLOL	Hypertensive Urgency Hypertension with CNS bleed Discomfort/Chest pain?cardiac origin with hypertension Afib/SVT - Stable	10-20mg IVP slow,MR @ 20-80mg q 10" to max of 300mg 2 mg/min IV drip titrate to BP 10-20mg IVP slow, MR @ 20-80mg q 10" 20 mg followed by 40 mg prn then 80 mg prn at q 10" intervals until rate controlled.		Asthma Cardiogenic shock Bradycardia Heart block BP <100mmHg
LIDOCAINE (XYLOCAINE)	VT VF/ pulseless VT Recurrent VF Post conversion from VT/VF with HR $\geq$ 60 bpm RSI (Caution if HR < 60 bpm)	1.5mg/kg IVP (no faster than 50mg/min) MR at 0.5mg/kg IVP q 8-10" to a max of 3mg/kg absorbed dose (including initial bolus). **OR** 3mg/kg ET, MR at 1mg/kg q 8-10" to a max of 3mg/kg absorbed dose (including initial bolus). For refractory VF, 2nd dose 1.5mg/kg in 3-5".	Adult doses should be given in increments rounded to the nearest 25mg amount. In the presence of shock, CHF or liver disease, the repeat bolus is recommended at 10" intervals.	

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
LIDOCAINE DRIP	Post Conversion	1-4 mg/min		
LIDOCAINE JELLY (2%) optional	Intubation or Nasopharyngeal airway	5ml	Apply to ET tube or nasal airway	
MAGNESIUM SULFATE	Torsades de Pointes Refractory VF Respiratory Distress with Bronchospasm _____ Pre-eclampsia Eclamptic seizures Premature Labor	1-2 GM IVP slow over 2-3” _____ 4 Gm IVP slowly then 1 Gm/hr IV drip		Heart block Respiratory depression
MANNITOL	In the presence of a severe head injury with the presence or development of the following symptoms: • Lateralizing motor signs • Posturing • Asymmetrical pupillary responses, not due to direct ocular trauma or by history	20% solution in 500ml NS, 0.5GM/kg IVP/IV drip		Systolic BP < 90 mmHg

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
MORPHINE SULFATE (MS)	Respiratory distess with rales ? cardiac etiology Pain management	2-20mg IVP 2-20 IM/IV 5-30 mg PO		
NARCAN (NALOXONE HCL)	Symptomatic ? Opioid OD excluding opioid-dependent pain management patients Symptomatic ?Opioid OD **IN** opioid dependent pain management patients	2 mg IV/IM/DirectIVP, MR Titrate 0.1 mg increments up to 2 mg IVP/or IM MR		
NITROGLYCERINE	Pain or discomfort of ?cardiac origin Respiratory distress with rales	0.4 mg, SL MR q 5 minutes	Use with caution in patients with borderline hypotension.	Suspected intracranial bleed Viagra use within 24 hours Shock CPR
NITROGLYCERINE INFUSION	Pain or discomfort of ?cardiac origin Respiratory Distress with rales	50 mg/250 NS IV @ 5 mcg/min. Increase q 5-10 minutes prn titrate to effect		
PHENERGAN	Nausea or vomiting	12.5 mg-25 mg IV/IM MRX1		
PITOCIN	Postpartum hemorrhage	20 units /1000 ml NS IV infusion @ max 250 ml per hour	May administer prior to delivery of placenta	

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
SODIUM BICARBONATE ($NaHCO_3$)	Pulseless rhythms Prolonged immersion in near drowning Tricyclic OD with widened QRS Hyperkalemia in hemodialysis patient Crush Injury	1 mEq/kg IVP MR 0.5 mEq/kg IV q 10” up to 1 mEq/kg IVP X 1		
SOLUMEDROL	Allergy / Anaphylaxis Respiratory distress Spinal Cord Injury	125mg IVP 30 mg/kg IVP, then 5 mg/kg IV drip over the next 23 hours		Head injury GCS $\leq$ 12
SUCCINYLCHOLINE	Neuromuscular blocking agent.	1-1.5mg/kg rapid IVP, MR **OR** 3-4mg/kg IM (not to exceed max dose of 150mg).	Use caution in known or suspected hyperkalemia.	
TERBUTALINE	Bronchospasm Premature Labor	0.25mg SC, MR q 15-30” 2.5mg/3 ml NS via nebulizer		
VECURONIUM	Neuromuscular Blockade	0.1 mg/kg IVP, MR		Unconfirmed airway

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AIR MEDICAL MEDICATION LIST 07/01/2003

MEDICATION	INDICATIONS	DOSAGE / ROUTE	COMMENTS	CONTRA-INDICATIONS
VERSED (MIDAZOLAM)	Sedation/Amnesia Post RSI sedation _____ Seizure _____ Behavioral emergency	2.5mg MR IV X2 _____ 0.1 mg/kg IVP, MR X 1 in 10 minutes. **OR** 0.2 mg/kg IM, to max of 10 mg MR X 1 in 10 minutes _____ 2-5 mg slow IVP, to max 5 mg	Attention to volume status and age.	

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	3 Kg	4 Kg	5 Kg	6 Kg	7 Kg	8 Kg	9 Kg	10 Kg	11 Kg	12 Kg	13 Kg	14 Kg	15 Kg
ET size	2.5-3.0	3.0	3.5	3.5	3.5	4.0	4.0	4.0	4.0	4.5	4.5	5.0	5.0
Defib	6j	8j	10j	12j	14j	16j	18j	20j	22j	24j	26j	28j	30j
Adenosine 3mg/ml 1st dose 0.1mg/kg	0.3mg (0.1ml)	0.4mg (0.1ml)	0.5mg (0.2ml)	0.6mg (0.2ml)	0.7mg (0.2ml)	0.8mg (0.3ml)	0.9mg (0.3ml)	1mg (0.3ml)	1.1mg (0.4ml)	1.2mg (0.4ml)	1.3mg (0.4ml)	1.4mg (0.5ml)	1.5mg (0.5ml)
Adenosine 2nd dose 0.2mg/kg	0.6mg (0.2ml)	0.8mg (0.3ml)	1mg (0.3ml)	1.2mg (0.4ml)	1.4mg (0.5ml)	1.6mg (0.5ml)	1.8mg (0.6ml)	2mg (0.7ml)	2.2mg (0.7ml)	2.4mg (0.8ml)	2.6mg (0.9ml)	2.8mg (0.9ml)	3mg (1ml)
Albuterol via O2 powered nebulizer 0.083%	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml
Amiodarone 5mg/kg to max 150mg bolus	15 mg	20 mg	25 mg	30 mg	35 mg	40 mg	45 mg	50 mg	55 mg	60 mg	65 mg	70 mg	75 mg
Ativan 0.1mg/kg	0.3mg	0.4mg	0.5mg	0.6mg	0.7mg	0.8mg	0.9mg	1mg	1.1mg	1.2mg	1.3mg	1.4mg	1.5mg
Atrovent 1 unit dose C: 0.02%	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml
Atropine 0.02mg/kg **	0.1mg (1.0ml)	0.1mg (1.0ml)	0.1mg (1.0ml)	0.12mg (1.2ml)	0.14mg (1.4ml)	0.16mg (1.6ml)	0.18mg (1.8ml)	0.2mg (2ml)	0.22mg (2.2ml)	0.24mg (2.4ml)	0.26mg (2.6ml)	0.28mg (2.8ml)	0.3mg (3ml)
Atropine - RSI 0.01mg/kg	0.1mg (1.0ml)	0.1mg (1.0ml)	0.1mg (1.0ml)	0.1mg (1.0ml)	0.1mg (1.0ml)	0.1mg (1.0ml)	0.1mg (1.0ml)	0.1mg (1.0ml)	0.11mg (1.1ml)	0.12mg (1.2ml)	0.13mg (1.3ml)	0.14mg (1.4ml)	0.15mg (1.5ml)
Benadryl 1mg/kg	3mg (0.1ml)	4mg (0.1ml)	5mg (0.1ml)	6mg (0.1ml)	7mg (0.1ml)	8mg (0.2ml)	9mg (0.2ml)	10mg (0.2ml)	11mg (0.2ml)	12mg (0.2ml)	13mg (0.3ml)	14mg (0.3ml)	15mg 0.3ml)
Calcium Gluconate 1 ml/kg	4 ml	5 ml	6 ml	7 ml	8 ml	9 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml

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** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	16 Kg	17 Kg	18 Kg	19 Kg	20 Kg	22 Kg	24 Kg	26 Kg	28 Kg	30 Kg	32 Kg	34 Kg
ET size	5.0	5.0	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.5	6.5
Defib	32j	34j	36j	38j	40j	44j	48j	52j	56j	60j	64j	68j
Adenosine 3mg/ml 1st dose 0.1mg/kg	1.6mg (0.5ml)	1.7mg (0.6ml)	1.8mg (0.6ml)	1.9mg (0.6ml)	2mg (0.7ml)	2.2mg (0.7ml)	2.4mg (0.8ml)	2.6mg (0.9ml)	2.8mg (0.9ml)	3mg (1ml)	3.2mg (1.1ml)	3.4mg (1.1ml)
Adenosine 3mg/ml 2nd dose 0.2mg/kg	3.2mg (1.ml)	3.4mg (1.1ml)	3.6mg (1.2ml)	3.8mg (1.3ml)	4mg (1.3ml)	4.4mg (1.5ml)	4.8mg (1.6ml)	5.2mg (1.7ml)	5.6mg (1.9ml)	6mg (2ml)	6.4mg (2.1ml)	6.8mg (2.3ml)
Albuterol via O2 powered nebulizer 0.083%	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	3ml	6ml	6ml
Amiodarone 5mg/kg to max 150mg bolus	80 mg	85 mg	90 mg	95 mg	100 mg	110 mg	120 mg	130 mg	140 mg	150 mg	150 mg	150 mg
Ativan 0.1mg/kg	1.6mg	1.7mg	1.8mg	1.9mg	2mg	2.2mg	2.4mg	2.6mg	2.8mg	3mg	3.2mg	3.4mg
Atrovent 1 unit dose C; 0.02%	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml	2.5 ml
Atropine 0.02 mg/kg **	0.32mg (3.2ml)	0.34mg (3.4ml)	0.36mg (3.6ml)	0.38mg (3.8ml)	0.4mg (4ml)	0.44mg (4.4ml)	0.48mg (4.8ml)	0.52mg (5.2ml)	0.56mg (5.6ml)	0.6mg (6ml)	0.64mg (6.4ml)	0.68mg (6.8ml)
Atropine RSI 0.01mg/kg	0.16mg (1.6ml)	0.17mg (1.7ml)	0.18mg (1.8ml)	0.19mg (1.9ml)	0.2mg (2ml)	0.22mg (2.2ml)	0.24mg (2.4ml)	0.26mg (2.6ml)	0.28mg (2.8ml)	0.3mg (3ml)	0.32mg (3.2ml)	0.34mg (3.4ml)
Benadryl 1mg/kg	16mg (0.3ml)	17mg (0.3ml)	18mg (0.4ml)	19mg (0.4ml)	20mg (0.4ml)	22mg (0.4ml)	24mg (0.5ml)	26mg (0.5ml)	28mg (0.6ml)	30mg (0.6ml)	32mg (0.6ml)	34mg (0.7ml)
Calcium Gluconate 1ml/kg	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml	10 ml

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	3 Kg	4 Kg	5 Kg	6 Kg	7 Kg	8 Kg	9 Kg	10 Kg	11 Kg	12 Kg	13 Kg	14 Kg	15 Kg
Charcoal 6.25 gm/oz 1gm/kg	3 gm 0.5 oz	4 gm 0.7 oz	5 gm 0.8 oz	6 gm 1 oz	7 gm 1.2 oz	8 gm 1.3 oz	8 gm 1.4 oz	10 gm 1.6 oz	11 gm 1.7 oz	12 gm 1.9oz	13 gm 2.1 oz	14 gm 2.3 oz	15 gm 2.4 oz
Dextrose 25% 0.5Gm/kg	1.5gm (6ml)	2gm (8ml)	2.5gm (10ml)	3gm (12ml)	3.5gm (14ml)	4gm (16ml)	4.5gm (18ml)	5gm (20ml)	5.5gm (22ml)	6gm (24ml)	6.5gm (26ml)	7gm (28ml)	7.5gm (30ml)
Dopamine in volutrol 100ml run at 5-20 ml/hr=5-20 mcg/kg	18 mg	24mg	30mg	36mg	42mg	48mg	54mg	60mg	66mg	72mg	78mg	84mg	90mg
Epinephrine 1:10,000 IV CPR	0.03mg (0.3ml)	0.04mg (0.4ml)	0.05mg (0.5ml)	0.06mg (0.6ml)	0.07mg (0.7ml)	0.08mg (0.8ml)	0.09mg (0.9ml)	0.1mg (1ml)	0.11mg (1.1ml)	0.12mg (1.2ml)	0.13mg (1.3ml)	0.14mg (1.4ml)	0.15mg (1.5ml)
Epinephrine 1:1000 Nebulized <3 yrs old >3 yrs old	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----	2.5 ml -----
Epinephrine Drip 100 ml volutrol 0.1-0.5mcg/kg/”	1.8mg @ 1-5 ml/hr	2.4mg@ 1-5 l/hr	3mg @ 1-5ml/hr	3.6mg @ 1-5ml/hr	4.2mg @ 1-5ml/hr	4.8mg @ 1-5ml/hr	5.4mg @ 1-5ml/hr	6mg @ 1-5ml/hr	1.3mg @ 5-25ml/hr	1.4mg @ 5-25ml/hr	1.6mg @ 5-25 ml/hr	1.7mg @ 5-25 l/hr	1.8 @ 5-5ml/hr

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	16 Kg	17 Kg	18 Kg	19 Kg	20 Kg	22 Kg	24 Kg	26 Kg	28 Kg	30 Kg	32 Kg	34 Kg
Charcoal 6.25 gm/oz 1gm/kg	16 gm (2.6 oz)	17 gm (2.7 oz)	18 gm (2. 9oz)	19 gm 3.0 oz)	20 gm (3.2 oz)	22 gm (3.5 oz)	24 gm (3.8 oz)	26 gm (4.2 oz)	28 gm (4.5 oz)	30 gm (4.8oz)	32 gm (5.1 oz)	34 gm (5.4 oz)
Dextrose 25% 0.5gm/kg	8 gm (32ml)	8.5gm (34ml)	9gm (36ml)	9.5gm (38ml)	10gm (40ml)	11gm (44ml)	12gm (48ml)	13gm (52ml)	14gm (56ml)	15gm (60ml)	16gm (64ml)	17gm (68ml)
Dopamine in volutrol, fill to 100cc, run at 5-20ml/hr= 5-20 mcg/kg	96mg	102mg	108mg	114mg	120mg	132mg	144mg	156mg	168mg	180mg	192mg	204mg
Epinephrine 1:10,000 IV 1st dose CPR	0.16mg (1.6ml)	0.17mg (1.7ml)	0.18mg (1.8ml)	0.19mg (1.9ml)	0.2mg (2ml)	0.22mg (2.2ml)	0.24mg (2.4ml)	0.26mg (2.6ml)	0.28mg (2.8ml)	0.3mg (3ml)	0.32mg (3.2ml)	0.34mg (3.4ml)
Epinephrine 1:1000 Nebulized <3 yrs old >3 yrs old	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 5 ml	 ----- 2.5 ml
Epinephrine Drip 100 ml volutrol 0.1-0.5mcg/kg/min	1.9mg @ 5-25ml/hr	2mg @ 5-25ml/hr	2.2mg @ 5-25ml/hr	2.3mg @ 5-25ml/hr	2.4mg @ 5-25ml/hr	1.3mg @ 10-50ml/hr	1.4mg @ 10-50 l/hr	1.6mg @ 10-50ml/hr	1.7mg @ 10-50ml/hr	1.8mg@ 1050ml/hr	1.9mg @ 10-50 ml/hr	2mg @ 10-50 ml/hr

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	3 Kg	4 Kg	5 Kg	6 Kg	7 Kg	8 Kg	9 Kg	10 Kg	11 Kg	12 Kg	13 Kg	14 Kg	15 Kg
Epinephrine 1:1000 SC	0.1mg (0.1ml)	0.1mg (0.1ml)	0.1mg (0.1ml)	0.1mg (0.1ml)	0.1mg (0.1ml)	0.1mg (0.1ml)	0.1mg (0.1ml)	0.1mg (0.1ml)	0.11mg (0.1ml)	0.12mg (0.1ml)	0.13mg (0.1ml)	0.14mg (0.1ml)	0.15mg (0.1ml)
Etomidate 2 mg/ml	0.9 mg 0.45ml	12 mg 0.6mls	1.5 mg 0.74mls	1.8 mg 0.9 mls	2.1 m 1.05 mls	2.4 mg 1.2 mls	2.7 mg 1.4mls	3 mg 1.5 mls	3.3mg 1.7mls	3.6 mg 1.8 mls	3.6 mg 2mls	4.2 mg 2.1 mls	4.5 mg 2.25 mls
Glucagon 0.05mg/kg (1mg/ml) IM	0.15mg (0.2ml)	0.2mg (0.2ml)	0.25mg (0.3ml)	0.3mg (0.3ml)	0.35mg (0.4ml)	0.4mg (0.4ml)	0.45mg (0.5ml)	0.5mg (0.5ml)	0.55mg (0.5ml)	0.6mg (0.6ml)	0.65mg (0.6ml)	0.7mg (0.7ml)	0.75mg (0.7ml)
Lasix 1mg/kg max 20mg (10mg/ ml)	3mg (0.3ml)	4mg (0.4ml)	5mg (0.5ml)	6mg (0.6ml)	7mg (0.7ml)	8mg (0.8ml)	9mg (0.9ml)	10mg (1ml)	11mg (1.1ml)	12mg (1.2ml)	13mg (1.3ml)	14mg (1.4ml)	15mg (1.5ml)
Lidocaine ** 1mg/kg (5mg/ml)	3mg (0.15ml)	4mg (0.2ml)	5mg (0.25ml)	6mg (0.3ml)	7mg (0.35ml)	8mg (0.4ml)	9mg (0.45ml)	10mg (0.5ml)	11mg (0.55ml)	12 mg (0.6ml)	13mg (0.65ml)	14mg (0.7ml)	15mg (0.75ml)
Magnesium Sulfate 25-50 mg/kg to max 2 Gm	75-150 mg	100-200 mg	125-250 mg	150-300 mg	175-350 mg	200-400 mg	225-450 mg	250-500 mg	275-550 mg	300-600 mg	325-650 mg	350-700 mg	375-750 mg
Mannitol 0.5Gm/kg (20Gm/100ml)	1.5gm (7.5ml)	2gm (10ml)	2.5gm (12.5ml)	3gm (15ml)	3.5gm (17.5ml)	4gm (20ml)	4.5gm (22.5ml)	5gm (25ml)	5.5gm (27.5ml)	6gm (30ml)	6.5gm (32.5ml)	7gm (35ml)	7.5gm (37.5ml)

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	16 Kg	17 Kg	18 Kg	19 Kg	20 Kg	22Kg	24 Kg	26 Kg	28 Kg	30 Kg	32 Kg	34 Kg
Epinephrine 1:1000 SC	0.16mg (0.2ml)	0.17mg (0.2ml)	0.18mg (0.2ml)	0.19mg (0.2ml)	0.2mg (0.2ml)	0.22mg (0.2ml)	0.24mg (0.2ml)	0.26mg (0.3ml)	0.28mg (0.3ml)	0.3mg (0.3ml)	0.3mg (0.3ml)	0.3mg (0.3ml)
Etomidate 2 mg/ml	4.8 mg 2.4 mls	5.1 mg 2.6 mls	5.4 mg 2.7 mls	5.7 mg 2.9 mls	6 mg 3 mls	6.6 mg 3.3 mls	7.2 mg 3.6 mls	7.8 mg 3.9 mls	8.4 mg 4.2 mls	9 mg 4.5 mls	9.6 mg 4.8 mls	10.2mg 5.1 mls.
Glucagon 0.05mg/kg (1mg/ml) IM	.8mg (0.8ml)	.85mg (0.9ml)	.9mg (0.9ml)	.95mg (1ml)	1mg (1ml)	1mg (1ml)	1mg (1ml)	1mg (1ml)	1mg (1ml)	1mg (1ml)	1mg (1ml)	1mg (1ml)
Lasix 1mg/kg max 20mg (10 mg/ml)	16 mg	17 mg	18 mg	19 mg	20 mg	20 mg	20 mg	20 mg	20 mg	20 mg	20 mg	20 mg
Lidocaine ** 1mg/kg (5mg/ml)	16mg (0.8ml)	17mg (0.85l)	18mg (0.9ml)	19mg (0.95ml)	20mg (1ml)	22mg (1.1ml)	24mg (1.2ml)	26mg (1.3ml)	28mg (1.4ml)	30mg (1.5ml)	32mg (1.6ml)	34mg (1.7ml)
Magnesium Sulfate 25-50 mg/kg to max 2 Gm	400-800 mg	425-850 mg	450-900 mg	475-950 mg	500-1000 mg	525-1050 mg	550-1100 mg	575-1150 mg	600-1200 mg	625-1250 mg	650-1300 mg	675-1350 mg
Mannitol 0.5gm/kg (20gm/100ml)	8gm (40ml)	8.5gm (42.5ml)	9gm (45ml)	9.5gm (47.5ml)	10gm (50ml)	11gm (55ml)	12gm (60ml)	13gm (65ml)	14gm (70ml)	15gm (75ml)	16gm (80ml)	17gm (85ml)

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	3 Kg	4 Kg	5 Kg	6 Kg	7 Kg	8 Kg	9 Kg	10 Kg	11 Kg	12 Kg	13 Kg	14 Kg	15 Kg
Morphine 0.1mg/kg (10mg/ml)	-----	------	------	-------	-------	------	------	1mg (0.1ml)	1.1mg (0.1ml)	1.2mg (0.1 ml)	1.3mg (0.1ml)	1.4mg (0.1ml)	1.5mg (0.2)
Morphine IR Oral Dose 0.3 mg/kg	------	------	-------	------	-------	-------	-------	3mg	3.3 mg	3.6 mg	3.9 mg	4.2 mg	4.5 mg
Narcan ** 0.1mg/kg (2mg/ml)	0.3mg (0.1ml)	0.4mg (0.1ml)	0.5mg (0.1ml)	0.6mg (0.1ml)	0.7mg (0.1ml)	0.8mg (0.1ml)	0.9mg (0.1ml)	1mg (0.1ml)	1.1mg (0.1ml)	1.2mg (0.1ml)	1.3mg (0.1ml)	1.4mg (0.1)	1.5mg (0.1)
Phenergan 0.5mg/kg	-------	------	--------	-----	------	------	------	5 mg	5.5 mg	6 mg	6.5 mg	7 mg	7.5 mg
Sodium Bicarbonate 1mEq/kg (1mEq/ml)	3mEq (3ml)	4mEq (4ml)	5mEq (5ml)	6mEq (6ml)	7mEq (7ml)	8mEq (8ml)	9mEq (9ml)	10 mEq (10ml)	11 mEq (11ml)	12 mEq (12ml)	13mEq (13ml)	14mEq (14ml)	15mEq (15ml)
Solumedrol 30mg/kg Spinal cord injury	90mg	120mg	150mg	180mg	210mg	240mg	270mg	300mg	330mg	360mg	390mg	420mg	450mg
1-2mg/kg Bronchospasm/ Anaphylaxis	3-6mg	4-8mg	5-10mg	6-12mg	7-14mg	8-16mg	9-18mg	10-20mg	11-22mg	12-24mg	13-26mg	14-28mg	15-30mg
Succinyl Choline 1.5mg/kg IV (20mg/ml)	4.5mg (0.2ml)	6mg (0.3ml)	7.5mg (0.3ml)	9mg (0.4ml)	10.5mg (0.5ml)	12mg (0.6ml)	13.5mg (0.6ml)	15mg (0.7ml)	16.5mg (0.8ml)	18mg (0.9ml)	19.5mg (0.9ml)	21mg (1.0ml)	22.5mg (1.1ml)
3-4mg/kg IM	9-12mg (0.45-0.6ml)	12-16mg (0.6-0.8ml)	15-20mg (0.7-1ml)	18-24mg (0.9-1.2ml)	21-28mg (1-1.4ml)	24-32mg (1.2-1.6ml)	27-36mg (1.3-1.8ml)	30-40mg (1.5-2ml)	33-44mg (1.6-2.2ml)	36-48mg (1.8-2.4ml)	39-52mg (1.9-2.6ml)	42-56mg (2.1-2.8ml)	45-60ml (2.2-3ml)

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	3 Kg	4 Kg	5 Kg	6 Kg	7 kg	8 kg	9 Kg	10 Kg	11 Kg	12 Kg	13 Kg	14 Kg	15 kg
Vecuronium 0.1 mg/kg	0.3 mg	0.4 mg	0.5 mg	0.6 mg	0.7 mg	0.8 mg	0.9 mg	1.0 mg	1.1 mg	1.2 mg	1.3 mg	1.4 mg	1.5 mg
Versed 5mg/ml Seizures 0.1mg/kg **IV**	0.3mg (0.1ml)	0.4mg (0.1ml)	0.5mg (.1ml)	0.6mg (0.1ml)	0.7mg (0.1ml)	0.8mg (0.2ml)	0.9mg (0.2ml)	1mg (0.2ml)	1.1mg (0.2ml)	1.2mg (0.2ml)	1.3mg (0.3ml)	1.4mg (0.3ml)	1.5mg (0.3ml)
0.2 mg/kg **IM**	0.6 mg	0.8mg	1.0 mg	1.2 mg	1.4 mg	1.6 mg	1.8 mg	2 mg	2.2 mg	2.4 mg	2.6 mg	2.8 mg	3.0 mg
Sedation	------	------	------	------	------	------	------	------	------	------	------	------	------
Sedation/Amnesia Post RSI 0.1 mg/kg	0.6mg (0.1ml)	0.8mg (0.2ml)	1mg (0.2ml)	1.2mg (0.2ml)	1.4mg (0.3ml)	1.6mg (0.3ml)	1.8mg (0.4ml)	2mg (0.4ml)	2.2mg (0.4ml)	2.4mg (0.5ml)	2.6mg (0.5ml	2.8mg (0.6ml)	3mg (0.6ml)

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	16 Kg	17 Kg	18 kg	19 Kg	20 Kg	22 Kg	24 kg	26 kg	28 kg	30 kg	32 Kg	34 Kg
Morphine 0.1mg/kg (10mg/ml)	1.6mg (0.2ml)	1.7mg (0.2ml)	1.8mg (0.2ml)	1.9mg (0.2ml)	2mg (0.2ml)	2.2mg (0.2ml)	2.4mg (0.2ml)	2.6mg (0.3ml)	2.8mg (0.3ml)	3mg (0.3ml)	3.2mg (0.3ml)	3.4mg (0.3ml)
Morphine IR Oral 0.3mg/kg	4.8 mg	5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	5 mg	5 mg
Narcan ** 0.1mg/kg (2mg/ml)	1.6mg (0.8ml)	1.7mg (0.8ml)	1.8mg (0.9ml)	1.9mg (0.9ml)	2mg (1ml)	2.2mg (1.1ml)	2.4mg (1.2ml)	2.6mg (1.3ml)	2.8mg (1.4ml)	3mg (1.5ml)	3.2mg (1.6ml)	3.4mg (1.7ml)
Phenergan 0.5mg/kg	8 mg	8.5 mg	9 mg	9.5 mg	10 mg	11 mg	12 mg	13 mg	14 mg	15 mg	16 mg	17 mg
Sodium Bicarbonate 1mEq/kg (1mEq/ml)	16mEq (16ml)	17mEq (17ml)	18mEq (18ml)	19mEq (19ml)	20mEq (20ml)	22mEq (22ml)	24mEq (24ml)	26mEq (26ml)	28mEq (28ml)	30mEq (30ml)	32mEq (32ml)	34mEq (34ml)
Solumedrol 30mg/kg Spinal cord injury 1-2mg/kg Bronchospasm/ Anaphylaxis	480mg 16-32mg	510mg 17-34mg	540mg 18-36mg	570mg 19-38mg	600mg 20-40mg	660mg 22-44mg	720mg 24-48mg	780mg 26-52mg	840mg 28-56mg	900mg 30-60mg	960mg 32-64mg	1020mg 34-68mg
Succinyl Choline 1.5mg/kg IV (20mg/ml) 3-4mg/kg IM	24mg (1.2ml) 48-64mg (2.4-3.2ml)	25.2mg (1.3ml) 51-68mg (2.5-3.4ml)	27mg (1.3ml) 54-72mg (2.7-3.6ml)	28.5mg (1.4ml) 57-76mg (2.8-3.8ml)	30mg (1.5ml) 60-80mg (3-4ml)	33mg (1.6ml) 66-88mg (3.3-4.4ml)	36mg (1.8ml) 72-96mg (3.6-4.8ml)	39mg (1.9ml) 78-104mg (3.9-5.2ml)	42mg (2.1ml) 84-112mg (4.2-5.6ml)	45mg (2.2ml) 90-120mg (4.5-6ml)	48mg (2.4ml) 96-128mg (4.8-6.4ml)	51mg (2.5ml) 102-136mg (5.1-6.8ml)

** **ET dose double IV dose, add 2-3ml NS**

AIR MEDICAL PEDIATRIC DRUG CHART
A-217 07/01/2003

Weight	16 Kg	17 Kg	18 kg	19 Kg	20 Kg	22 Kg	24 kg	26 kg	28 kg	30 kg	32 Kg	34 Kg
Vecuronium 0.1 mg/kg	1.6 mg	1.7 mg	1.8 mg	1.9 mg	2.0 mg	2.2 mg	2.4 mg	2.6 mg	2.8 mg	3.0 mg	3.2mg	3.4 mg
Versed 5mg/ml Seizures: 0.1mg/kg **IV**	1.6mg (0.3ml)	1.7mg (0.3ml)	1.8mg (0.4ml)	1.9mg (0.4ml)	2mg (0.4ml)	2.2mg (0.4ml)	2.4mg (0.5ml)	2.6mg (0.5ml)	2.8mg (0.6ml)	3mg (0.6ml)	3.2mg (0.6ml)	3.4mg (0.7ml)
0.2 mg/kg **IM**	3.2 mg	3.4 mg	3.6 mg	3.8 mg	4 mg	4.4 mg	4.8 mg	5.2 mg	5.4 mg	6 mg	6.4 mg	6.8 mg
Sedation	------	------	------	------	2.0 mg	2.2 mg	2.4 mg	2.6mg	2.8 mg	3.0 mg	3.2mg	3.4mg
Sedation/Amnesia Post RSI 0.1 mg/kg	1.6 mg	1.7 mg	1.8 mg	1.9 mg	2.0 mg	2.2 mg	2.4 mg	2.6 mg	2.8 mg	3.0 mg	3.2 mg	3.4 mg

** **ET dose double IV dose, add 2-3ml NS**

SUBJECT: AIR MEDICAL TREATMENT PROTOCOL -- ABDOMINAL PAIN (Non-Traumatic) **Date: 07/01/2003**

BLS	ALS
Ensure patent airway O_2 and/or ventilate prn NPO Anticipate vomiting	IV TKO, adjust prn to maintain systolic BP >90, sustain mentation and pink, dry skin Monitor EKG. Nausea/vomiting, **consider**: Phenergan 12.5-25 mg IV/IM, MR X1

Approved:

EMS Medical Director

SUBJECT: AIR MEDICAL TREATMENT PROTOCOL -- AIRWAY OBSTRUCTION (FOREIGN BODY) **Date: 07/01/2003**

BLS	ALS
For a conscious patient: • Reassure,encourage coughing. • O2 prn • Abdominal thrusts (chest thrusts in obesity/pregnancy) **If patient becomes unconscious:** • Abdominal thrusts prn **If patient is unconscious when found:** • Attempt to ventilate. (Reposition prn) • Abdominal thrusts prn **Once obstruction is removed** • High flow O2, ventilate prn	**If patient becomes unconscious or has a decreasing LOC:** • Direct laryngoscopy and Magill forceps *If unsuccessful in removing a complete airway obstruction:* Needle Cricothyrotomy/Surgical Cricothyrotomy/Comitube **Once obstruction is removed:** • Monitor O2 saturation • Monitor EKG • Intubate prn • IV TKO

NOTE: *Stat transport while continuing abdominal thrusts.*

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway 0_2 and/or ventilate prn. Remove sting/injection mechanism May assist patient to self-administer own prescribed medication **ONE TIME ONLY.** Base Hospital contact required prior to any repeat dose. **Latex Sensitive Patients** Should be managed in a latex safe environment without compromising patient care. Prehospital personnel should inform the receiving facility personnel at the time of transfer if they become aware that the patient is latex sensitive. Pediatric patients with a long or complex medical history (such as spina bifida, cerebral palsy, or neurologic disorders) frequently exhibit latex sensitivity. Questions regarding the management of latex sensitive patients should be referred to the Base Hospital. See Management of Latex Sensitive Patients (Equipment List) S-105)	Monitor O2 Saturation prn Monitor EKG Intubate/Cricothyrotomy for laryngeal edema **Allergic Reaction (may include mild hypotension)**: Benadryl 50mg slow IVP/IM IV TKO; adjust prn *In the presence of respiratory distress with bronchospasm:* Albuterol 6ml (0.083%) via O_2 powered nebulizer MR Atrovent 2.5ml (0.02%) added to first dose of Albuterol via continuous O_2 powered nebulizer. *If severe respiratory distress with bronchospasm or inadequate response to Albuterol/Atrovent consider:* Epinephrine 1:1000 0.3mg SC, MR q10" x2 (max 3 doses) **Exposure to Allergen with Previous Severe Reaction and with onset of any allergic symptoms (e.g. urticaria, swelling etc)** Epinephrine 1:1,000, 0.01mg/kg SC Benadryl 50mg slow IVP/IM **Consider:** Solumedrol 125mg IV (IM if no IV) ***If respiratory distress with bronchospasm treat with Albuterol/Atrovent as above:*** **Consider:** Terbutaline 0.25mg SC, MR in 15-30" **OR** 2.5mg in 3ml NS via O_2 powered nebulizer **Anaphylaxis (shock or cyanosis)** Epinephrine 1:1000 0.3 mg SC, MR q10" X2 (max 3 doses) IV wide open . Epinephrine 0.1-0.3mg 1:10,000 IVP, MR (max 0.3 mg q10")**OR** Epinephrine 2mg 1:1,000 ET, MR Benadryl 50mg slow IVP/IM Solumedrol 125mg IVP Dopamine 400mg/250ml @ 5-40 mcg/kg/min. Titrate BP to 100-120mmHg systolic ***If respiratory distress with bronchospasm treat with Albuterol/Atrovent as above:*** **Consider:** Terbutaline 0.25mg SC, MR in 15-30" **OR** 2.5mg in 3ml NS via O_2 powered nebulizer

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway, 0_2 and/or ventilate prn. Spinal immobilization when indicated. Secretion problems, position on affected side. Do not allow patient to walk. Restrain prn. Hypoglycemia: (suspected): If patient is awake and has gag reflex, give 2 packets of granulated sugar with fruit juice or other liquid. If patient is unconscious, NPO Seizures: Protect airway, and protect from injury Treat associated injuries. Spinal immobilization prn.	Identify and treat cause. Intubate prn, consider RSI. Monitor EKG, Pulse Oximetry IV TKO, adjust prn Venous/capillary sampling **Symptomatic suspected Opioid OD** *Excluding opioid dependant pain management patient:* • Narcan 2 mg **IVP/DIVP/IM** *For patient refusing transport* • Give additional 2 mg **IM** *For opioid- dependant pain management patient:* • Narcan titrate 0.1mg up to 2 mg IVP/direct IVP or IM MR Hypoglycemia: Altered LOC D_{50} 25Gm if BS ≤75mg/dl or BS unobtainable, MR D_{50} 25Gm if BS >75mg/dl if sample result? Glucagon 1 ml IM (if no IV) in patient with altered LOC & BS ≤75mg/dl or unobtainable Seizures: a. Generalized seizures lasting >5". b. Focal seizures with respiratory compromise c. Recurrent seizures without lucid interval d. Prolonged focal seizure. Give: Versed 0.1mg IVP (max dose 5 mg), MR in 10" **OR** Versed 0.2mg/kg (max dose 10mg) IM, MR in 10" **OR** Ativan 1-2 mg IVP/IM MR up to 4 mg

Approved:

EMS Medical Director

Behavioral Emergencies: Restrain only if necessary to prevent injury. If LOC is diminished, use prone or lateral position. Avoid unnecessary sirens. Consider law enforcement support. For patients under 72 hour hold, encourage their participation in the transport without restraints. Consider ground transport if combative, a danger to the crew and unsafe for flight. (See Policy S-422)	Behavioral Emergencies: Consider: Ativan 1-2 mg IV/IM MR q 5 " to max of 4 mg **OR** Versed 2-5mg slow IVP to max of 5 mg Hypertensive Urgency: BP systolic >220 or diastolic >120 in the presence of end-organ system dysfunction. Consider: Labetolol 10-20mg slow IVP, MR 20-80mg q10" to max of 300mg **OR** Labetolol 2mg/min IV drip, titrate to BP. CVA If GCS $\leq$ 8 consider RSI

Note: For Pregnancy Induced Hypertension - see A-233

Approved:

EMS Medical Director

BLS	ALS
Move to a safe environment. Break contact with causative agent. Ensure patent airway, O_2 and/or ventilate prn. Treat other life threatening injuries. THERMAL BURNS: Burns of < 10% body surface area, cool with non-chilled water or saline. For burns of > 10% body surface area, cover with dry dressings and keep warm. Do not allow the patient to become hypothermic. CHEMICAL BURNS: Flush with copious water. Brush off dry chemicals. TAR BURNS: Cool with water, transport; do not remove tar.	Monitor O2 Saturation Intubate prn Monitor EKG prn IV TKO prn, adjust prn For patients meeting Burn Center criteria: ≥ 15 yo IVNS 500 ml/hr MS 2mg - 20mg IVP/IM If unable to give IV/IM may use MS PO per Pain Management Protocol. *In the presence of respiratory distress with bronchospasm:* Albuterol 6 ml 0.083% via Nebulizer, MR Atrovent 2.5 ml 0.02% added to first dose of Albuterol via Nebulizer.

Note: Base Hospital Contact and Transport (per S-415):
Will be made to UCSD Base Hospital for patients meeting burn center criteria.

BURN CENTER CRITERIA
Patients with burns involving:

- 20% second degree or ≥5% 3rd degree of BSA
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet or perineum or circumferential
- significant electrical injury due to high voltage (greater than household current/ 110 volts)

Disposition:
Hyperbaric chamber for suspected CO poisoning.

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway. Ventilate. Remove any dermal NTG. CPR	Monitor EKG/ Pulse oximetry. Where no monitor available: Precordial thump for witnessed arrest. Defibrillate. Intubate. IV TKO . Epinephrine 1:10,000, 1mg IVP, MR q3-5". **OR** Epinephrine 1:1000, 2mg ET, MR q3-5". **OR** Epinephrine 1:1000, 10 mg (diluted to 20 mls) ETAD –esophageal placement via port 1 (blue) MR q 3-5 min. Defibrillate. **Consider:** $NaHCO_3$ 1mEq/kg IVP, MR at 0.5mEq/kg IVP q10". Defibrillate. **Consider:** NG. ?Hypovolemia: 2 IV's wide open STAT transport.

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway O2 and/or ventilate prn. Do not allow patient to walk May assist patient to self-medicate Nitroglycerine SL if systolic BP>110 mm Hg	Monitor EKG/Pulse Oximetry IV TKO **OR** 2 large bore IV's TKO, adjust rate prn if ?aortic aneurysm Treat dysrhythmias NTG 0.4 mg SL if BP≥100 mm Hg MR q 5 minutes ASA 324mg chewable po **Consider** NTG 50mg/250 NS IV drip at 10-20 mcg/min titrate to pain relief MS 2 mg IVP to max 20 mg if NTG ineffective or contraindicated <u>Discomfort /pain of ?cardiac origin with associated hypotension:</u> IV TKO Fluid challenge to max 200 ml with clear lungs, MR prn **<u>Consider:</u>** Dopamine 400 mg/250 ml NS, 5-40 mcg/kg/min, titrate BP to 100-120 mm Hg systolic. <u>Discomfort/pain of ?cardiac origin with associated hypertension:</u> BP >200 mm Hg, diastolic >120mm HG **<u>Consider:</u>** Labetolol IV 10-20 mg slow IVP, MR at 20-80 mg q10"to max 300 mg

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	**ALS**
O_2 and/or ventilate prn.	Monitor EKG/ Monitor O2 Saturation IV TKO, adjust prn Intubate prn A. Unstable Bradycardia with Pulse: (Chest pain, dyspnea, BP <90 mm Hg or altered LOC). If bradycardia is severe and patient is unconscious, begin chest compressions. Atropine Sulfate 0.5-1mg IVP for pulse ≤40bpm MR to max of 3mg **OR** Atropine Sulfate 1-2mg ET for pulse ≤40bpm, MR to max of 3mg absorbed dose **If ineffective, consider:** External Pacing Dopamine 400mg in 250ml at 5-40mcg/kg/min IV, titrate to BP=100-120 mmHg Systolic (after max Atropine) Epinephrine 1:1000, 1mg in 250ml NS at 2-10 mcg/min IV drip titrate to pulse and BP . B. Supraventricular Tachycardia (SVT): **Stable**: VSM/CSM if stable MR Adenosine 6mg rapid IVP, followed with 20ml NS IVP, **if ineffective** Adenosine 12mg rapid IVP followed with 20ml NS IVP, MR x1 in 1-2" Labetolol 20 mg followed by 40 mg if needed, followed by 80 mg if needed at q 10" intervals until rate controlled. Hold for systolic <100 mmHg. **Unstable**:(chest pain, dyspnea, BP ≤90mmHg or altered LOC): VSM/CSM MR Adenosine 6mg rapid IVP, followed with 20ml NS IVP **if ineffective** Adenosine 12mg rapid IVP, followed with 20ml NS IVP, MR x1 ***If rhythm refractory to treatment or symptoms are severe:*** Versed 2.5 mg MR X2 slow IVP prn cardioversion Synchronized cardioversion at 100 j, increase prn to max of 360 j **Unconscious:** Synchronized cardioversion at 100 j MR at 200, 300, 360 j

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	**ALS**
O_2 and/or ventilate prn.	C. Uncontrolled Atrial Fibrillation/Atrial Flutter In the presence of symptomatic uncontrolled ventricular response with rate ≥ 180 Labetolol 20 mg followed by 40 mg if needed, followed by 80 mg if needed at q 10" intervals until rate controlled. Hold for systolic <100 mmHg. In the presence of uncontrolled ventricular response with rate ≥ 180, hypotension and decreasing LOC: Versed 2.5 mg slow IVP MR X 2 prn precardioversion Cardioversion at 100, 200, 300, 360 j

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	**ALS**
1. Stable: conscious, pulse O_2 and/or ventilate prn. 2. Unstable: ?conscious Assist ventilation	Monitor EKG/ Pulse Oximeter Intubate prn IV TKO, adjust prn D. Ventricular Tachycardia (VT): 1. Stable VT: Lidocaine 1.5 mg/kg slow IVP, MR at 0.5mg/kg slow IVP q8-10" (not to exceed total of 3mg/kg absorbed dose including initial bolus) **OR:** Amiodarone 150 mg over 10" MR X 1 in 10 minutes. 2. Unstable VT: (chest pain, dyspnea, BP≤90mmHg or altered LOC): Precordial thump for witnessed onset **Conscious**: Versed 2.5 mg IVP/IM MR X2. Synchronized cardioversion at 100j, MR @ 200j, 360j prn. **Unconscious**: Synchronized cardioversion at 100j MR @ 200j, 360j prn. If ineffective Lidocaine 1.5 mg/kg slow IVP, MR at 0.5mg/kg slow IVP q8-10" (not to exceed total of 3mg/kg absorbed dose including initial bolus) **OR:** Amiodarone 300 mg IVP, followed prn by 150 mg IVP over 10 minutes. **THEN, for Post Conversion** (if not already given): If Amiodarone is the converting agent: Amiodarone 1 mg/min IV drip For all other patients: Lidocaine 1.5mg/kg IVP, MR at 0.5mg/kg slow IVP q8-10", not to exceed a total of 3mg/kg absorbed dose (including initial bolus) **OR** Lidocaine 1-4 mg/min IV drip **OR** Lidocaine 3mg/kg ET, MR at 1mg/kg q8-10" not to exceed 3mg/kg absorbed dose (including initial bolus)

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	**ALS**
?conscious / pulseless): CPR Assist ventilation	**E.** VF/Pulseless VT: Precordial thump for witnessed initial onset. Defibrillate prn Intubate and ventilate IV TKO Epinephrine 1:10,000, 1mg IVP, MR q3- 5" **OR** Epinephrine 1:1000, 2mg ET, MR q3-5" Amiodarone 300 mg IVP, followed prn by 150 mg IVP over 10 minutes. Lidocaine 1.5mg/kg slow IVP, MR x1 in 3-5" **OR** Lidocaine 3mg/kg ET, MR x1 in 3-5" Magnesium Sulfate 1-2 Gm IV (Torsades de Pointes, hypomagnesemic state or recurrent VF) **Consider:** $NaHCO_3$ 1mEq/kg IVP, MR at 0.5mEq/kg IVP q10" if possible hyperkalemia, prolonged arrest, tricyclic OD or suspected acidosis **F.** Post Conversion VT/VF, AICD conversion with pulse >50bpm: If Amiodarone is the converting agent: Amiodarone 1 mg/min IV drip For all other patients: Lidocaine 1.5mg/kg IVP, MR at 0.5mg/kg slow IVP q8-10", not to exceed a total of 3mg/kg absorbed dose (including initial bolus) **OR** Lidocaine 1-4 mg/min IV drip **OR** Lidocaine 3mg/kg ET, MR at 1mg/kg q8-10" not to exceed 3mg/kg absorbed dose (including initial bolus)

Approved:

EMS Medical Director

Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

BLS	**ALS**
O_2 and/or ventilate prn. CPR	Monitor EKG. Intubate prn. IV TKO, adjust prn. Attempt to determine cause and treat. **G.** Pulseless Electrical Activity (PEA) Epinephrine 1:10,000, 1mg IVP, MR q3-5". **OR** Epinephrine 1:1000, 2mg ET, MR q3-5". For HR≤60/min: Atropine Sulfate 1mg IVP, MR x2 to a max. of 3mg absorbed dose. **OR** Atropine Sulfate 2mg ET, MR x2 to a max of 3mg absorbed dose. **Consider:** If ? Hyperkalemia: $NaHCO_3$ 1mEq/kg IVP, then 0.5 mEq/kg IVP q10". Calcium Gluconate 10 mls IVP If ? Hypovolemia, Fluid challenge If ? Tension Pneumothorax, consider needle thoracotomy/chest tube insertion. If ? Pericardial Tamponade, consider pericardiocentesis and fluid challenge **H.** Asystole: Intubate and ventilate Epinephrine 1:10,000, 1mg IVP, MR in 3-5". **OR** Epinephrine 1:1000, 2mg ET, MR in 3-5". Atropine Sulfate 1mg IVP, MR q3-5"x2 to max 3 mg **OR** Atropine Sulfate 2mg ET, MR q3-5"x2 to max 3mg absorbed dose **Consider:** $NaHCO_3$ 1mEq/kg IVP, then 0.5mEq/kg IVP q10" Discontinue resuscitative efforts if no response noted per policy A-406

Approved:

EMS Medical Director

BLS	ALS
O_2 and/or ventilate prn. JELLYFISH STING: Rinse with alcohol; do not rub or apply pressure. STINGRAY OR SCULPIN INJURY: Heat as tolerated. SNAKEBITES: Mark proximal extent of swelling. Keep involved extremity at heart level and immobile.	Monitor EKG/Pulse Oximeter prn Intubate prn IV TKO prn, adjusted prn MS 2mg–20 mg IVP/IM prn pain If unable to start IV or give IM treat with PO MS per Pain Management Protocol. **Snakebites**: 200ml NS IV bolus & repeat q30" MS 2mg - 20mg IVP/IM prn pain If unable to start IV or give IM treat with PO MS per Pain Management Protocol. **Symptomatic Black Widow Spider Bites:** Ativan 1-2 mg IV MR up to 4mg Calcium Gluconate 10 ml IV

Approved:

EMS Medical Director

BLS	ALS
Ensure patient airway. 0_2 and/or ventilate prn. Remove excess/wet clothing. Heat Exhaustion: Cool gradually: A. Fanning, sponging with tepid water. B. Avoid shivering. C. If conscious, give small amounts of fluids. Heat Stroke: Rapid cooling: A. Ice packs to carotids, femorals and axillae. B. Sponge with tepid water. C. Fan, avoid shivering. Cold Exposure: Gentle warming: A. Blankets, warm packs -not to exceed 110 F. B. Dry dressings. C. Avoid unnecessary movement or rubbing. D. If alert, give warm liquids. E. If severe, NPO. F. Prolonged CPR may be indicated.	Monitor EKG/Pulse Oximeter. Intubate prn. IV TKO, adjust prn. Severe hypothermia with cardiac arrest: Hold medications Continue CPR If defibrillation needed, limit to 3 shocks maximum

Note: Consider fluid resuscitation in young healthy adults in high heat/high exertion situations even if BP is within normal limits.

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway, give O_2, ventilate if necessary.	Monitor EKG/Pulse Oximeter Intubate prn IV TKO in arm that does not have graft/AV fistula if possible, adjust rate prn Suspected Hyperkalemia (widened QRS complex and peaked T-waves): $NaHCO_3$ up to 1mEq/kg IVP x1 Calcium Gluconate 10 ml IVP

NOTE: Access percutaneous venous access catheter (Vascath) or dialysis graft for definitive therapy only. Consider patient's hospital of choice for transport.

Approved:

EMS Medical Director

BLS ALS

BLS	ALS
100% O_2, and/or ventilate prn. Spinal immobilization when indicated. Remove wet clothing	Monitor EKG Monitor O2 saturation Intubate with inline spinal stabilization as indicated, IV TKO, adjust prn $NaHCO_3$ up to 1mEq/kg IVP x1

Diving Victims: Any victim who has been breathing from compressed air sources below the water's surface and presents with the following:
Minor presentation: minimal localized joint pain, mottling of the skin surface, localized swelling with pain; none of which are progressive.
Major presentation: symptoms listed above that are severe and/or rapidly progressing, vertigo, altered LOC, progressive paresthesia, paralysis, severe SOB, blurred vision, crepitus, hematemesis, hemoptysis, pneumothorax, trunk pain, or girdle or band-like burning discomfort.

Disposition of Diving Victims:
Major presentation:
All patients with a "major" presentation should be transported to UCSD-Hillcrest
Trauma issues are secondary in the presence of a "Major" presentation
If the airway is unmanageable, divert to the closest BEF.

Minor presentation:
Major trauma candidate: catchment trauma center
Non-military patients: routine
Active duty military personnel: transport to the Military Duty Recompression Chamber if possible. The Base Hospital will contact the Duty Recompression Chamber at (619) 556-7130 to determine chamber location. Paramedics/Base hospitals shall transfer care to the Diving medical Officer (or designee) upon arrival to the chamber. Hyperbaric treatment may begin in accordance with military medical protocols.
Naval Hyperbaric Chamber Locations
North Island Naval Air Station
Naval Station 32nd Street and Harbor Drive
Naval Special Warfare – Coronado

Note: If possible, obtain dive computer or records
Hyperbaric Chambers must be capable of recompression to 165 ft.

Approved:

EMS Medical Director

BLS	ALS
MOTHER: Ensure patent airway. O_2, ventilate prn If no time for transport and delivery is imminent (crowning and pushing), proceed with delivery. If no delivery, transport on left side. Routine Delivery: Massage fundus if placenta delivered. (Do not wait on scene). Place ID bands on Mother and Infant Post Partum Hemorrhage: Massage fundus. Baby to breast. Trendelenburg position. Eclampsia (Seizures): Protect airway, and protect from injury. Spinal immobilization when indicated. STAT transport for third trimester bleeding.	MOTHER: IV TKO, adjust prn. Fetal Monitoring Post Partum Hemorrhage: Pitocin 20 units/1000cc IV adjust rate prn, titrate to bleeding. Pregnancy Induced Hypertension (BP syst >160, diast >100 with HA or visual changes) Monitor EKG/Pulse Oximeter Consider bilat IVs, TKO Magnesium Sulfate 4GM IV drip over 20" then 1 GM over next hour IV drip Apresoline 5 mg IV give over 2-5 minutes MR in 20 minutes. (Max 15 mg.) ***Titrate to maintain BP between 90-100 diastolic*** Eclampsia (Seizures): Monitor EKG/Pulse Oximeter Intubate prn Consider second IV line, TKO Seizure precautions Place in L lateral position Magnesium Sulfate 4GM IV drip over 20" then 1 GM over next hour IV drip per Apresoline 5mg IV over 5 min, MR q20" to max of 15mg If seizures continue: Versed 0.1mg/kg IV(max dose 5 mg), MR in 10" **OR** Versed 0.2mg/kg IM(max dose 10mg), MR in 10" **OR** Ativan 1-2 mg IV/IM q 5"MR to max of 4 mg Premature Labor Magnesium Sulfate 4GM IV over 20 min THEN 1-2 gm/HR IV drip Terbutaline 0.25mg SC, MR q 15-30" prn up to 0.50mg.

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway. O_2 and/or ventilate prn Consider transport LEFT side for ingestions. Skin: remove clothes and brush off, or rinse substance with copious amount of water. Inhalation/Smoke/Gas/Toxic Substance: move patient to safe environment. 100% O2 via mask. Consider transport to a facility with Hyperbaric chamber. ?Tricyclic OD: Hyperventilate Contamination with commercial grade ("low level") radioactive material: Patients with mild injuries may be decontaminated (removal of contaminated clothing, brushing off material) prior to treatment and transport. Decontamination proceedings SHALL NOT delay treatment and transport of patients with significant or life-threatening injuries. Treatment of significant injuries is *always* the priority. Protect from injury.	Monitor EKG Monitor O2 Saturation Intubate prn IV TKO, adjust prn Ingestions: Charcoal 50GM PO (excluding isolated iron ingestion). Assure pt has a gag reflex and is cooperative. Symptomatic ?OpioidOD (*excludingOpioid dependent pain management patients):* Narcan 2 mg IVP/direct IVP: MR If patient refuses transport, give additional Narcan 2 mg IM. Symptomatic ? Opioid OD in Opioid dependent pain management patients: Narcan titrate 0.1 mg up to 2 mg IVP/direct IVP or IM per MR Organophosphate poisoning: Atropine 2mg IVP/IM. MR q1" prn titrate to symptoms **OR** Atropine 4mg ET, MR q1" prn Extrapyramidal reactions: Benadryl 50mg slow IVP/deep IM ?Tricyclic OD with cardiac effects (i.e. widened QRS): $NaHCO_3$ up to 1mEq/kg IVP, MR x2 until QRS shortens.

Note: Charcoal ineffective with alcohol, heavy metals, lithium, and iron ingestions.

Approved:

EMS Medical Director

BLS

Previously established electrolyte and/or glucose peripheral IV lines:

Maintain at preset rates.
Turn off when indicated.

Previously applied dermal medication delivery systems:

Remove dermal NTG when indicated (CPR, shock)

Previously established medication delivery systems and/or other preexisting treatment modalities with preset rates (non interfacility transport):

Proceed with transport when person responsible for operating the device (the individual or another person) is able to continue to provide this function during transport.

If the person responsible for operating the device is unable to continue to provide this function during transport, contact the BH for direction.

BH may ONLY direct BLS personnel to
1. Leave device as found OR turn the device off;
THEN,
2. Transport patient OR wait for ALS arrival.

Interfacility Transports:

No wait period is necessary for routine oral/dermal medications or completed aerosol treatments.

Check for prior IV, IM, SQ, and non-routine PO medication delivery to assure minimum wait period of 30".

If there is a central line, the tip of which lies in the central circulation, the catheter MUST be capped with a device which occludes the end.

IV solutions with added medications OR other ALS treatment/monitoring modalities require ALS personnel(or RN/MD) in attendance during transport.

ALS

Previously established electrolyte and/or glucose containing IV solutions:

Adjust rate or D/C prn

Previously applied topical medication delivery systems:

Remove dermal NTG or other dermal medications prn

Pre-existing internal/external vascular access:

Use at all times as primary access for definitive therapy ONLY.

Previously established medication delivery systems and/or other preexisting treatment modalities with preset rates:

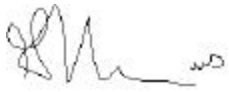
Adjust or D/C prn
If no medication label or identification of infusing substances may D/C.

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway Reassurance. O_2 and/or ventilate prn. Hyperventilation: Coaching/reassurance. Remove patient from causative environment. Consider ?organic problem. Toxic Inhalants (CO exposure, smoke, gas,etc): Consider transport to facility with hyperbaric chamber. Known asthmatics: Consider oral hydration Respiratory Distress with croup-like cough: Aerosolized Saline or Water via oxygen powered nebulizer/mask.	Monitor EKG Monitor O2 Saturation. Intubate prn, Consider RSI IV TKO, adjust rate prn Respiratory distress with rales (?cardiac origin): NTG 0.4mg SL if BP ≥100mmHg, MR x2 q5" Lasix 20-100mg IVP, MR to max of 100mg NTG ointment ½-1" MS 2mg IVP if NTG ineffective or contraindicated. MR to 20 mg Respiratory Distress with Bronchospasm (?respiratory etiology): Albuterol 6ml (0.083%) via 0_2 powered nebulizer, MR Atrovent 2.5 ml 0.02 % added to first dose of Albuterol via Nebulizer . **OR** Terbutaline 0.25mg SC, MR in 15-30" If no known cardiac history and age<55 yo: Epinephrine 0.3mg 1:1,000 SC, MR in 10". **Consider:** Solumedrol 125mg IVP Respiratory Distress due to ? Pneumothorax Needle thoracostomy or Chest Tube Insertion

Approved:



EMS Medical Director

BLS/ALS

Ensure patent airway.

0_2 and/or ventilate prn.

Do not allow patient to bathe or change clothes.

Consult with Law Enforcement on scene for evidence collection.

If the patient requires a medical evaluation, transport to the closest, most appropriate facility. Law Enforcement will authorize and arrange an evidentiary exam after the patient is stabilized. If only evidentiary exam is needed, may release to law enforcement for transport to a SART facility

Approved:

EMS Medical Director

BLS	ALS
Shock: O_2 and/or ventilate prn. Control obvious external bleeding. Treat associated injuries. NPO, anticipate vomiting. Trendelenburg Remove transdermal NTG	Monitor EKG Monitor O2 Saturation Intubate prn Shock (noncardiac): 2 IV's wide open Shock: Normovolemia (anaphylactic shock, neurogenic shock, septic shock): IV titrate to BP Dopamine 400mg/250ml, 5-40 mcg/kg/min, titrate to BP=100-120 mmHg systolic Shock (?cardiac etiology): IV TKO **Consider:** fluid challenge to max. 500ml with clear lungs Dopamine 400mg/250ml, 5-40 mcg/kg/min, titrate BP=100-120 mmHg systolic Spinal Cord Injury: **Consider:** Solumedrol 30 mg/kg IV slowly with GCS >12 (contraindicated in Head injury)

Treat cause of Shock:

Tension Pneumothorax - Needle Thoracostomy or Chest Tube Insertion

Cardiac Tamponade - Pericardiocentesis

Dysrhythmias - per Protocol

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway, protecting C-spine. Spinal immobilization prn. O_2 and/or ventilate prn. Control obvious bleeding. Abdominal Trauma: Cover eviscerated bowel with saline pads. Chest Trauma: Cover open chest wound with three-sided occlusive dressing; release dressing if ?tension pneumothorax develops. Extremity Trauma: Splint neurologically stable fractures as they lie. Use traction splint as indicated. Grossly angulated long bone fractures with neurovascular compromise may be reduced with gentle unidirectional traction for splinting per BHO. Impaled Objects: Immobilize & leave impaled objects in place. Remove per *BHPO* **Exception**: may remove impaled object in face/cheek, or from neck if there is total airway obstruction Pregnancy of >6mo: Where spinal immobilization precaution is indicated, tilt on spine board 30 degrees, left lateral decubitus.	IV TKO adjust prn Bilateral IV's wide open for hypovolemic shock Monitor EKG Monitor O2 Saturation Intubate prn, consider RSI prn Crush Injury: IV, adjust rate prn (Rate 1.5L/hr when extremity released) $NaHCO_3$ 1mEq/kg IVP Extremity Trauma: MS 2mg IVP to 20mg for isolated injuries If unable to start IV can us MS PO or IM per pain management protocol. Grossly angulated long bone fractures may be reduced with gentle unidirectional traction for splinting Impaled Objects: Immobilize & leave impaled objects in place. **Exception**: may remove impaled object in face/cheek or neck if ventilation compromised.

Approved:

EMS Medical Director

BLS	ALS
Neurological Trauma (Head and Spine Injuries): Ensure adequate oxygenation without hyperventilating patient. Traumatic Arrest: CPR. D/C per *BHPO*.	Neurological Trauma (Head & Spine Injuries): If GCS ≤8: Intubate - RSI Mannitol 0.5Gm/kg IV over 10-15 min **Criteria for use** • Lateralizing signs • Posturing • Asymmetrical pupilliary responses not due to direct ocular trauma or history. Consider NG/OG tube Spinal Cord Injury: Dopamine 400mg/250ml, 5-40 mcg/kg/min titrate to BP =100-120 mm Hg systolic **Consider:** Solumedrol 30mg/kg IV slowly with GCS >12 (contraindicated in Head Injury) Severe Respiratory Distress(with absent breath sounds, hypotension, cyanosis or tracheal deviation) Needle Thoracostomy or Chest Tube Insertion prn Severe Respiratory Distress (with complete airway obstruction): Needle/surgical cricothyrotomy/Combitube. Traumatic Arrest 2 IV's wide open enroute Consider NG enroute Discontinue resuscitative efforts per policy A-406

Note: Preserve and transport amputations with patient.

TRANSPORT GUIDELINES:
Routine Disposition-Pediatric patients who meet criteria outlined in T-461 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Children's Hospital Emergency Department, EXCEPT in the following situations:

1. Adult + Child:

a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility (peds-Childrens; adult-Sharp). If both patients are critical, or if there are other questions, both may be delivered to Sharp.

b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to Childrens and the adult to the catchment area trauma facility.

2. Bypass/Diversion: If Children's Hospital Trauma Center is "on bypass", pediatric trauma candidates should be delivered to the closest appropriate (i.e. catchment area)facility.

Approved:

EMS Medical Director

PROCEDURE:

To direct prehospital personnel during an incident with multiple patients that does not require the activation of Annex D.

BLS/ALS

A. First in radio person will assume responsibility for all scene communication.

B. Only one (1) BH will be contacted during the entire incident including during transport.

C. Prehospital providers will utilize Simple Triage and Rapid Transport (START) guidelines to determine priorities of treatment and transport.

D. If staffing resources are limited, CPR need not be initiated for arrest victims, however if CPR has been initiated prior to arrival of ALS personnel or briefly during assessment, discontinue only if one of the following occurs or is noted:

a) subsequent recognition of obvious death SO
b) per *BHPO*
c) presence of valid DNR Form/Order Medallion SO
d) lack of response to brief efforts in the presence of any other potentially salvageable patient requiring intervention.
*** ALS discontinue resuscitation based on Policy A-406

E. Split the aeromedical team, contact BH to confirm destination prior to leaving scene or ASAP enroute, SO. (If the aeromedical team is split, each paramedic and/or nurse may still perform ALS duties as per the protocols and their scope of practice). **** In the event that patients are transported by other than aeromedical team, medical modalities initiated by the aeromedical team can be continued per S-135.***

F. Radio communication must include the following on each patient:
1. patient number assignment (i.e., #1, #2 . . .)
2. age
3. sex
4. mechanism
5. chief complaint
6. abnormal findings
7. treatment initiated

G. Assisting medical transporting responders who arrive on scene should refrain from actions which delay rapid transport.

Approved:

EMS Medical Director

SUBJECT: AIR MEDICAL -TREATMENT PROTOCOL -- PAIN MANAGEMENT **Date: 7/1/03**

BLS	ALS
Assess level of pain using standardized pain scale provided below Ice, immobilize and splint when indicated Elevation of extremity trauma when indicated	**Pain score Pain score assessment of ≤ 4*:*** Continue to monitor and reassess pain as appropriate. **For treatment of pain score assessment of ≥ 5 with *BP* ≥ *100 mmHG*:** MS 10 - 30mg PO **OR** MS 5- 10mg IM **OR** MS 2-4 mg increments to max of 20mg

Note: These orders may be implemented after the paramedic assesses the level of pain and determines if patient agrees to treatment.
ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.
The parenteral dose relative strength of MS is 1/3 the oral dose of MS.

Approved:

EMS Medical Director

BLS	ALS
For a conscious patient: Reassure, encourage coughing. O_2 prn. 5 abdominal thrusts only if complete airway obstruction, MR prn (Chest thrusts in obesity/pregnancy). If patient becomes unconscious OR has a decreasing LOC: 5 abdominal thrusts. MR prn. If patient is unconscious when found: Attempt to ventilate. (Reposition prn). 5 abdominal thrusts prn. NOTE: 5 chest thrusts and back blows for infants <1 year, MR prn. Once obstruction is removed: High flow O_2, ventilate prn. NOTE: If suspected epiglottitis; put patient in sitting position. Do not visualize the oropharynx STAT transport.	If patient becomes unconscious or has a decreasing LOC: Direct laryngoscopy and Magill forceps, MR prn. If unsuccessful in removing a complete airway obstruction: Needle Cricothyrotomy / Surgical Cricothyrotomy or Combitube. Once obstruction is removed: Monitor EKG, Pulse Oximeter IV TKO

Transport:

STAT transport while continuing thrusts

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway, O_2 and/or ventilate prn. Spinal immobilization when indicated. Secretion problems, position on affected side. Do not allow patient to walk. Restrain prn.	Identify and treat cause. Intubate prn, consider RSI Monitor EKG, Pulse Oximeter IV TKO, adjust rate prn. Venous/capillary blood sampling. Suspected Opiate OD Narcan 0.1mg/kg IV/IM in symptomatic ?opioid OD, excluding opioid dependent pain management patients, MR.
Hypoglycemia (suspected): If patient is awake and has gag reflex, give 1 packet If patient is not conscious, NPO	Hypoglycemia: Altered LOC: D_{25} 2cc/kg IVP if BS ≤75mg/dl (Infant ≤60mg/dl), MR. D_{25} 2cc/kg IVP if BS unobtainable. D_{25} 2cc/kg IVP if BS >75mg/dl (Infant ≤60mg/dl) if result? Glucagon .05mg/kg IM (if no IV) in patient with altered LOC and BS ≤75mg/dl (Infant ≤60mg/dl) or unobtainable.
Seizures: Protect airway, and protect from injury Treat associated injuries Spinal immobilization prn. If febrile remove excess clothing. Behavioral Emergencies: Restrain only if necessary to prevent injury. If LOC is diminished, use prone or lateral position. Consider law enforcement support. For patients under 72 hour hold, encourage their participation in the transport without restraints.	Seizures: FOR: a. Ongoing generalized seizures lasting >five(5) min. b. Focal seizures with respiratory compromise. c. Recurrent seizures without lucid interval. d. Prolonged focal seizure GIVE: Versed 0.1mg/kg IVP (max dose 5 mg), MR in 10" **OR** Versed 0.2mg/kg IM (max dose 10 mg), MR in 10" **OR** Ativan 0.1 mg/kg slow IVP or IM MR up to 4 mg

Approved:

EMS Medical Director

BLS ALS

BLS	ALS
Ensure patent airway. 0_2 and/or ventilate prn. Remove sting/injection mechanism. May assist patient with meds, but may NOT administer. **Latex Sensitive Patients** Should be managed in a latex safe environment without compromising patient care. Prehospital personnel should inform the receiving facility personnel at the time of transfer if they become aware that the patient is latex sensitive. Pediatric patients with a long or complex medical history (such as spina bifida, cerebral palsy, or neurologic disorders) frequently exhibit latex sensitivity. Questions regarding the management of latex sensitive patients should be referred to the Base Hospital. See Management of Latex Sensitive Patients (Equipment List) S-105)	Monitor O2 Saturation prn Monitor EKG prn Intubate/Cricothyrotomy for laryngeal edema. IV TKO, adjust rate prn. **Allergic reaction (may include mild hypotension):** Benedryl 1mg/kg IM/IVP IV TKO adjust rate prn . ***In the presence of respiratory distress with bronchospasm***: Albuterol 6ml (0.083%) via O_2 powered nebulizer, MR. Atrovent 2.5 mls added to first Albuterol treatment **Exposure to Allergen with Known Severe Reaction with onset of any allergic symptoms (e.g. urticaria, swelling etc)** Epinephrine 1:1000 0.01mg/kg SC Benadryl 1mg/kg IM/IVP. **Consider:** Solumedrol 1-2mg/kg IVP. In the presence of respiratory distress with bronchospasm: Albuterol 6ml (0.083%) via O_2 powered nebulizer, MR. Atrovent 2.5 mls added to first Albuterol treatment **Anaphylaxis:** IV 20ml/kg, MR. Epinephrine 0.01mg/kg 1:1000 SC, MR q10" x2 (max 0.3ml) Epinephrine 0.01mg/kg 1:10,000 IV, MR. **OR** Epinephrine 0.2mg/kg 1:1,000 ET , MR. Benadryl 1 mg/kg (not to exceed 50mg). **Consider:** Solumedrol 1-2mg/kg IVP. In the presence of respiratory distress with bronchospasm: Albuterol 6ml (0.083%) via 0_2 powered nebulizer, MR. Atrovent 2.5 mls added to first Albuterol treatment

Approved:

EMS Medical Director

BLS	ALS
Assess level of consciousness Determine peripheral pulses Ensure patent airway, ventilate prn CPR when heart rate indicates and patient is unstable: **Unstable Bradycardia:** Includes one or more of the following: A. Heart rate: Infant (<1 yr) <80 bpm Child (1-8 yrs) <60 bpm (9-14 yrs) <40 bpm B. Poor Perfusion (cyanosis, delayed capillary refill, mottling) C. Altered LOC, Dyspnea or BP [70+ (2 x age)] D. Diminished or absent peripheral pulses NOTE: ?dehydration may cause tachycardias up to 200/min.	Monitor EKG/ Pulse Oximeter IV TKO, adjust rate prn **(May consider intraosseous if unable to start IV line)** Intubate prn Insert OG prn **Supraventricular tachycardia (Premie-3yrs >240bpm** **4yrs or older >200bpm):** VSM/CSM Adenosine 0.1mg/kg(max 6mg)IVP, follow with 20ml NS IVP (Use extreme caution in patients with a history of bronchospasm. Adenosine 0.2mg/kg (max 12mg)IVP, follow with 20ml NS IVP, MR x1. Versed 0.1mg/kg slow IVP (1mg/min) in patients > 20 kg, prn precardioversion. Synchronized cardioversion 1j/kg, MR with 2j/kg, 4j/kg, 4j/kg (Contraindicated if unable to deliver <4j/kg). **Asystole:** Epinephrine 1:10,000, 0.01mg/kg IVP, MR q3-5" **OR** Epinephrine 1:1000, 0.2mg/kg ET, MR q3-5". **Unstable Bradycardia:** (see definition in left column) Epinephrine 1:10,000, 0.01mg/kg IVP, MR q3-5" **OR** Epinephrine 1:1000, 0.2mg/kg ET, MR q3-5". If age ≥30days: (after 2nd Epinephrine dose): Atropine 0.02mg/kg IV q5" to a max of 3mg absorbed dose (Minimum dose 0.1mg). **OR** Atropine 0.04mg/kg ET to a max of 3mg absorbed dose (Minimum dose 0.1mg). If a stable rhythm is restored but hypotension persists, administer Epinephrine 1:10,000, 0.05mg/kg IVP, MR q10" **OR Consider:** Epinephrine drip 0.1-0.5mcg/kg/min IV.

Approved:

EMS Medical Director

BLS	ALS
	PEA: Epinephrine 1:10,000, 0.01mg/kg IVP, MR q3-5" **OR** Epinephrine 1:1000, 0.2mg/kg ET, MR q3-5". Fluid challenge 20cc/kg, MR. **VF/pulseless VT:** Defibrillate 2joules/kg, 4j/kg, 4j/kg . Epinephrine 1:10,000, 0.01mg/kg IVP **OR** Epinephrine 1:1000, 0.2mg/kg ET, MR q3-5". Amiodarone 5mg/kg to max 300mg IV bolus **OR** Lidocaine 1.0mg/kg IVP, MR x1 in 3-5"to a maximum of 3mg/kg absorbed dose (including initial bolus). **OR** Lidocaine 2mg/kg ET, MRx1 in 3-5"to a maximum of 3mg/kg absorbed dose (including initial bolus). **Post conversion VT/VF (if not already given):** If Amiodarone is the converting agent: Amiodarone 1 mg/min IV drip Lidocaine 1.0mg/kg IV, MR at 0.5mg/kg q8-10" not to exceed a total of 3mg/kg (including initial bolus, absorbed dose) **OR** Lidocaine 2mg/kg ET, MR at 1mg/kg q3-5" not to exceed 3mg/kg absorbed dose (including initial bolus)

Discontinue resuscitative efforts based on policy A-406

Approved:

EMS Medical Director

BLS	ALS
O_2 and/or ventilate prn. JELLYFISH STING: Rinse with alcohol; do not rub or apply pressure. STINGRAY OR SCULPIN INJURY: Heat as tolerated. SNAKEBITES: Mark proximal extent of swelling. Keep involved extremity at heart level and immobile.	Monitor EKG/ Pulse Oximeter prn Intubate prn IV TKO prn, adjust rate prn MS 0.1mg/kg IVP to 10mg prn pain If unable to start IV or give IM use MS IR per Pain Management Protocol SNAKEBITES: 20ml/kg NS IV bolus & repeat q30" MS 0.1mg/kg IVP to 10mg prn If unable to start IV or give IM use MS IR per Pain Management Protocol Symptomatic Black Widow Spider Bites: Ativan 0.05-.01mg/kg slow IVP or IM MR to max of 2 mg. Calcium Gluconate 1.1-1.5 mls/kg IVP

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway. O_2 and/or ventilate prn Ingestions: Identify ingested substance Consider transport LEFT side for ingestions. Skin: Remove clothes and brush off, or rinse substance with copious amounts of water. Inhalation of Smoke/Gas/Toxic Substance: Move patient to safe environment. ?Tricyclic OD: Hyperventilate Identify ingested substance. Protect from injury.	Monitor EKG. IV TKO, adjust rate prn. Monitor O2 Saturation prn Ingestions: Charcoal 1Gm/kg PO (excluding isolated iron ingestion). Assure child has gag reflex and is cooperative. Symptomatic ? opioid OD (*excluding opioid- dependent pain management patients*): Narcan 0.1mg/kg up to a maximum dose of 2 mg direct IVP/IV/IM, MR Symptomatic ? opioid OD in opioid -dependent pain management patients: Narcan 0.1mg/kg titrate 0.1mg increments up to a maximum dose of 2 mg direct IVP/IV (dilute IV dose to 10 ml with NS) or IM. Organophosphate poisoning: Atropine 0.02mg/kg IVP/IM, MR q1" prn **OR** Atropine 0.04mg/kg ET ,MR q1" prn Extrapyramidal reactions: Benadryl 1mg/kg slow IVP/IM. ?Tricyclic OD with cardiac effects (i.e. widened QRS) : $NaHCO_3$ 1mEq/kg IVP, MR

NOTE:
Charcoal is ineffective with alcohols, heavy metals, lithium, iron.

Approved:

EMS Medical Director

BLS	ALS
BABY: Keep warm and dry. (WRAP IN WARM DRY BLANKET) Ensure patent airway. O_2, ventilate 100% O2 prn. Apply an identification band/bracelet. Document time of delivery. **Routine Delivery:** Suction baby's airway first mouth then nose when head is delivered and prn. Clamp and cut cord between clamps following delivery APGAR at 1" and 5". **Meconium delivery:** Additional vigorous suctioning and BVM ventilation may be necessary. If mechanical suction is used keep pressure between 80 and 100 cm H2O otherwise use bulb syringe. **Cord wrapped around neck:** Slip the cord over the head and off the neck; clamp and cut the cord if wrapped too tightly. **Prolapsed cord:** Place the mother in shock position with her hips elevated on pillows, or knee chest position. Insert a gloved hand into the vagina and gently push the presenting part off the cord. TRANSPORT STAT WHILE RETAINING THIS POSITION. DO NOT REMOVE HAND UNTIL RELIEVED BY HOSPITAL PERSONNEL. **Breech Birth:** Allow infant to deliver to the waist without active assistance (support only); when legs and buttocks are delivered, the head can be assisted out. If head does not deliver within 4-6 min, insert a gloved hand into the vagina and create an airway for the infant. Transport STAT if head undelivered. **Premature and/or Low Birth Weight Infants:** STAT transport. When HR <100bpm, ventilate 100%O2. If HR <80bpm p1" ventilation, then CPR. CPR need NOT be initiated if there are no signs of life AND: a) weight <500Gm OR, b) gestational age is <24 weeks, OR, c) eyelids are fused closed.	BABY: Monitor O2 saturation prn Ventilate 100% O2 if HR<100 bpm. If HR remains <80bpm p 1" ventilation, then intubate and perform CPR NG prn **Premature and low birth weight infants:** Monitor EKG

Disposition: Direct to Labor/Delivery area
Note: If time allows, place identification bands on mother and infant

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway. Dislodge any airway obstruction. Transport in position of comfort. Reassurance. O_2 and/or ventilate prn. Hyperventilation: Coaching/reassurance. Remove patient from causative environment. Consider ?organic problem. Toxic Inhalants (CO exposure, Smoke, Gas, etc): Move patient to a safe environment 100% O2 via mask Consider transport to facility with hyperbaric chamber. Respiratory Distress with Croup-like Cough: Aerosolized Epinephrine via oxygen powered nebulizer/mask.	Monitor EKG Monitor O2 saturation prn. Intubate prn, consider RSI. IV TKO, adjust rate prn. Respiratory Distress with Bronchospasm (?respiratory etiology): Albuterol 3ml (0.083%) via 0_2 powered nebulizer MR. Atrovent 2.5ml, 0.02% via O2 powered nebulizer with first dose Albuterol. *If severe respiratory distress with bronchospasm or inadequate response to Albuterol/Atrovent consider:* Epinephrine 0.01mg/kg 1:1,000 SC (max 0.3mg), MR in 10" **Consider:** Solumedrol 1-2mg/kg IV. Magnesium Sulfate 25-50 mg/kg IV over 20 minutes to max of 2 Gm. Respiratory Distress due to ?Pneumothorax Needle thoracostomy or chest tube insertion. Complete Airway Obstruction (as last resort effort): Needle/surgical cricothyrotomy.

NOTE: If history suggests epiglottitis, do NOT visualize airway.

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EMS Medical Director

BLS	ALS
Assess level of consciousness Ensure patent airway, 0_2 and assist ventilation. Determine peripheral pulses and capillary refill. Control hemorrhage Protect from injury	IV TKO, Adjust prn Monitor EKG Monitor O2 Saturation Intubate prn Fluid challenge: 20 ml/kg IV for shock. MR if no known history of heart disease. **Consider:** Dopamine 5-20mcg/kg/min IV drip, adjust to maintain BP.

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Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway, protecting C-spine. Spinal immobilization prn. O_2 and/or ventilate prn. Control obvious bleeding Abdominal Trauma: Cover eviscerated bowel with saline pads. Chest Trauma: Cover open chest wound with three-sided occlusive dressing; release dressing if? tension pneumothorax develops. *Extremity Trauma: Splint neurologically stable fractures as they lie. Use traction splint as indicated Grossly angulated long bone fractures with neurovascular compromise may be reduced with gentle unidirectional traction for splinting per BHO. Impaled Objects: Immobilize & leave impaled objects in place. Remove per *BHPO* **Exception**: may remove impaled object in face/cheek, or from neck if there is total airway obstruction Neurological Trauma (Head and Spine Injuries): Assure adequate ventilation without hyperventilation.	IV TKO, adjust prn, Monitor EKG/ Pulse Oximeter Intubate prn; consider RSI for GCS ≤8. Crush Injury: IV, adjust prn (Rate 20ml/kg when extremity released) $NaHCO_3$ 1mEq/kg IVP Hypovolemic Shock NS 20ml/kg IV bolus, adjust rate to maintain BP> [70 +(2 x age)] Extremity Trauma: MS 0.1mg/kg IVP to 10mg for isolated injuries If IV or IM Unable: MS IR per Pain Management Protocol Grossly angulated long bone fractures may be reduced with gentle unidirectional traction for splinting Impaled Objects: Immobilize & leave impaled objects in place. May remove impaled object in face/cheek or neck if ventilation compromised. Neurological Trauma (Head & Spine Injuries) If GCS ≤8: Intubate -RSI Mannitol 0.5gm/kg IV over 10-15 min **Criteria for use:** • Lateralizing motor signs • Posturing • Asymmetrical pupilliary responses, not due to direct ocular trauma or history **Consider:** NG/OG Spinal Cord Injury: NS 20ml/kg IV fluid challenge, MR Dopamine at 5-40mcg/kg/min titrate to BP systolic 100mm Hg **Consider:** Solumedrol 30mg/kg IV slowly with GSC>12 (contraindicated in head injury) Severe Respiratory Distress (absent breath sounds, hypotension, or cyanosis): Needle thoracostomy or chest tube insertion

*Preserve and transport amputations with patient

Approved:

EMS Medical Director

	Severe Respiratory Distress (with complete airway obstruction): Needle/surgical cricothyrotomy
Traumatic Arrest: CPR D/C per *BHPO*.	Traumatic Arrest: 2 IV's 20ml/kg, MR. NG/OG enroute Discontinue resuscitative efforts per policy A-406

TRANSPORT GUIDELINES:
Routine Disposition-Pediatric patients who meet criteria outlined in T-461 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Children's Hospital emergency department, EXCEPT in the following situations:

1. Adult + Child:

a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility (peds-Children's; adult-Sharp). If both patients are critical, or if there are other questions, both may be delivered to Sharp.

b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to Children's and the adult to the catchment area trauma facility.

2. Bypass/Diversion: If Children's Hospital Trauma Center is "on bypass", pediatric trauma candidates should be delivered to the closest appropriate (i.e. catchment area) facility.

Approved:

EMS Medical Director

BLS	ALS
Move to a safe environment. Break contact with causative agent. Ensure patent airway, O_2 and/or ventilate prn. Treat other life threatening injuries. THERMAL BURNS: Burns of <10% BSA cool with non-chilled saline or water. For burns of ≥ 10% BSA, cover with dry dressing and keep warm. Do not allow patient to become hypothermic. CHEMICAL BURNS: Flush with copious water. Brush off dry chemicals. TAR BURNS: Cool with water, transport; do not remove tar.	Monitor EKG Monitor O2 Saturation Intubate prn IV TKO prn, adjust prn For patients meeting burn center criteria: 5-14 yo IV NS 250 ml/hr <5 yo IV NS 150 ml/hr Burns without respiratory involvement: MS 0.1 mg/kg increments IVP to a max of 10mg If IV or IM unable: MS IR per Pain Management Protocol *In the presence of respiratory distress with bronchospasm:* Albuterol 6ml 0.083% via Nebulizer MR Atrovent 2.5ml 0.02% added to first dose of Albuterol

Note: Base hospital Contact and Transport (Per S-415) Will be made to UCSD Base Hospital for patients meeting burn center criteria.

BURN CENTER CRITERIA: Patients with burns involving:

- ≥10% 2nd or 5% 3rd degree of BSA
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet or perineum or circumferential
- significant electrical injury due to high voltage (> than household current/110 volts)

Disposition: Hyperbaric chamber for suspected CO poisoning.

Approved:

EMS Medical Director

BLS	ALS
Ensure patent airway. Ventilate. CPR	Where no monitor available: Consider early Base hospital contact for disposition/pronouncement at scene. Ventilate per BVM X 1min., then reassess HR prior to drug therapy Defibrillate. Intubate. IV TKO . NG prn Monitor O2 Saturation Epinephrine 1:10,000, 0.01mg/kg IVP, MR q3-5". Epinephrine 1:1000, 0.1mg ET, MR q3-5". Epinephrine 1:1000 10 mg diluted to 20 mls ETAD-esophageal port 1 (blue) MR q 3-5 minutes. For patients in non-perfusing rhythms, flush line with 3 mls of NS after administration of each medication. Defibrillate.

Approved:

EMS Medical Director

SUBJECT: PEDIATRIC AIR MEDICALTREATMENT PROTOCOL – PAIN MANAGEMENT

BLS	ALS
Assess level of pain Immobilize/splint when indicated Ice/elevation when indicated	**Pain score assessment of ≤ 4*:*** Continue to monitor and reassess pain as appropriate. **For treatment of pain score assessment of ≥ 5 with *BP ≥ 70 + 2x age in years*:** MS 2-10mg PO per pediatric drug chart. MR to max of 30mg PO. **OR** MS 1-5mg IM per pediatric drug chart. MR to max of 10mg IM. **OR** MS 1-10mg IV per pediatric drug chart. MR to max of 20mg .

Note: These orders may be implemented after the paramedic assesses the level of pain and determines if patient agrees to treatment.
ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.
The parenteral dose relative strength of MS is 1/3 the oral dose of MS.

Approved:

EMS Medical Director

SUBJECT: PARAMEDIC TRAINING PROGRAM STUDENT ELIGIBILITY **Date: 01/01/05**

I. **Authority**: Health and Safety Code, Division 2.5, Sections 1797.208 and 1797.214.

II. **Purpose:** To establish the minimum Paramedic Training Program student eligibility requirements.

II. **Policy**:

A. To be eligible to enter an approved Paramedic training program, an individual shall meet all the following requirements:

1. Possess a high school diploma or GED certificate.
2. Possess a current health care provider or professional rescue CPR card (AHA/ARC).
3. Possess a current EMT- Basic, EMT-II or NREMT EMT-Intermediate certificate.
4. Have the equivalent of at least six months experience in the provision of emergency care in the prehospital setting as an EMT-Basic or Intermediate.
4. Pass, by predetermined standards, a pre-entrance examination.
5. Meet requirements of affiliated clinical or field agencies which may include but not be limited to:
    a. Criminal background check

Approved:

Administration **EMS Medical Director**

b. DMV ambulance driver's license with current and valid Medical Examiner's certification

c. Immunizations

d. Drug screens.

B. The minimum requirements identified in this policy shall not preclude paramedic training programs from requiring additional prerequisites, admission procedures, etc. as part of the application process.

Approved:

Administration **EMS Medical Director**

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Administration **EMS Medical Director**

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Approved:

Administration **EMS Medical Director**

Materials to be Submitted	Check One: Enclosed	To Follow	For County Use Only
1. Documentation of Eligibility for Program Approval. 100147(b)			
2. Letter to Paramedic Training Approving Authority Requesting Approval. 100152(a)			
3. Check list forParamedic Program Approval.			
4. Completed Application Form for Program Approval.			
5. Program Medical Director Qualification Form and Job Description. 100148(a)			
6. Program Course Director Qualification Form and Job Description. 100148(b)			
7. Program Principal Instructor(s) Qualification Form and Job Description. 100148(c)			
8. Teaching Assistant(s). 100148(d) Submit Names and Subjects Assigned to Each Teaching Assistant and Job Description.			
9. Field Preceptor(s). Submit Names, Qualifications and Job Description. 100148(e)			
10. Hospital Clinical Preceptor(s). Qualifications Form and Job Description. 100148(f)			
11. Copy of Written Agreements with (one or more) Base Hospital(s) to Provide Clinical Experience. 100150			
12. Provisions for Supervised Hospital Clinical			
13. Copy of Written Agreement with (one or more) Paramedic Service Provider(s) to Provide Field Experience. 100151			
14. Provisions for Supervised Field Internship			

Materials to be Submitted	Check One		
	Enclosed	To Follow	For County Use Only
15. Course Curriculum, including: A. Course Outline B. Statement of Course Objectives C. At least 6 Sample Lesson Plans D. Performance Objectives for Each Skill E. At least 10 Samples of Written Questions Used in Periodic Testing F. Final Skills Exam			
16. Completed Course Content Checklist			
17. Class Schedules: Places and Dates Estimate if Necessary. 100152			
18. Copy of Course Completion Record. 100161			
19. Copy of Liability Insurance on Students.			
20. Copy of Fee Schedule.			
21. Description of how Program Provides Adequate Facilities, Equipment, Examination Security and Student Record-keeping. 100152			

COUNTY OF SAN DIEGO DIVISION OF EMERGENCY MEDICAL SERVICES

APPLICATION FORM

EMT-P TRAINING PROGRAM

1. **Name of Institution/Agency** _____

   Street _____

   City _____ **Zip Code** _____

   Contact Person _____

   Telephone Number _____ **Extension** _____

2. **Personnel:**

   Program Medical Director _____

   Course Director _____

   Principal Instructor(s) _____

   _____

   _____

   _____

   _____

   _____

   Teaching Assistants

Name	**Subjects Assigned**

Clinical Preceptors:

Name	Base Hospital Affiliation

Field Preceptors

Name;______________________________Agency: ___________________

Paramedic License: ________________-Date of original licensure: _____________

Preceptor class Y N (circle one)

Name;______________________________Agency: ___________________

Paramedic License: ________________-Date of original licensure: _____________

Preceptor class Y N (circle one)

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Name;______________________________Agency: ___________________

Paramedic License: ________________-Date of original licensure: _____________

Preceptor class Y N (circle one)

Name;______________________________Agency: ___________________

Paramedic License: ________________-Date of original licensure: _____________

Preceptor class Y N (circle one)

Name;______________________________Agency: ___________________

Paramedic License: ________________-Date of original licensure: _____________

Preceptor class Y N (circle one)

Name;______________________________Agency: ___________________

Paramedic License: ________________-Date of original licensure: _____________

Preceptor class Y N (circle one)

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3. Course Hours:

Total: _____

Didactic and Skills Lab: _____

Hospital Clinical Training : _____

Field Internship: _____

4. Texts _____

_____

_____

_____

_____

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_____

_____

_____

_____

_____

COUNTY OF SAN DIEGO DIVISION OF EMERGENCY MEDICAL SERVICES
EMT-P TEACHING QUALIFICATIONS

Check One:

__ Program Director
__ Course Director
__ Principal Instructor
__ Clinical Preceptor

1. Name: _____

2. Occupation: _____

3. Professional or Academic Degrees Held:

a. _____

b. _____

c. _____

4. Professional License/Certification Number(s):

a. _____

b. _____

c. _____

5. California Teaching Credentials Held:

a. Type: _____ Expiration Date: _____

b. Type: _____ Expiration Date: _____

6. Emergency Care-Related Education within the last 5 years:

Course Title	School	Course Length	Date Completed
a.			
b.			
c.			

7. Emergency Care-Related Experience within the last 5 years:

Position	Duties	Organization	Dates
a.			
b.			
c.			

Approvals:

_____ _____ _____

Medical Director Course Director Date

COUNTY OF SAN DIEGO DIVISION OF EMERGENCY MEDICAL SERVICES
EMT-PARAMEDIC TRAINING PROGRAM

COURSE CONTENT CHECKLIST

	Page No.	County Use

Division 1: Prehospital Environment

1. Roles and Responsibilities
2. Emergency Medical Services Systems
3. Emergency medical services systems components
   - a. Recognition and access
   - b. Initiation of the emergency medical services response
   - c. Management of the scene
   - d. Medical control
   - e. Scene control
   - f. When to call for backup
4. Transportation of emergency personnel, equipment and the patient
   - a. California Highway Patrol equipment mandate (requirements)
   - b. Determination of destination
5. Overview of hospital categorization and designation
   - a. Base hospital
   - b. Critical care centers (e.g., Trauma Centers, Pediatric Centers)
   - c. Emergency facility - comprehensive, basic, standby
   - d. Receiving hospital
6. Communications overview
   - a. Radio
   - b. Telemetry
   - c. Telephone
7. Recordkeeping
8. Multicasualty incidents and disasters

COURSE CONTENT CHECKLIST (cont.)

	Page No.	County Use

9. Role and responsibility of the State and local EMS system management

10. Laws governing Paramedics

    a. Abandonment

    b. Child abuse, elder abuse, and other laws that require reporting

    c. Consent - implied and informed

    d. Good Samaritan Laws

    e. Legal detention

    f. Local policies and procedures

    g. Medical control

    h. Medical practice acts affecting the EMT-Ps

    i. Negligence

    j. Overview of EMT-I, EMT-II and EMT-P in California

    k. Special procedures utilized for victims of suspected criminal acts including preservation of evidence

    l. The health professional at the scene

    m. Written medical records

11. Overview of issues concerning the health professional

    a. Death and dying

    b. Malpractice protection

    c. Medical ethics and patient confidentiality

    d. Safeguards against communicable diseases

12. Emergency medical services communication system

    a. Radio communication

    b. System components

    c. Telephone communication

COURSE CONTENT CHECKLIST (cont.)

Page No. County Use

13. Communication regulations and procedures
    a. Radio troubleshooting
    b. Radio use
    c. Role of Federal Communications Commission (FCC)
    d. Radio mechanics, skills protocols
14. Extrication and rescue
15. Multicasualty disaster management
    a. Local policies and protocols
    b. Medical management
    c. Triage
16. Hazardous materials, gas and radiation
17. Stress Management

Division 2: Preparatory Knowledge and Skills

1. Medical terminology
2. Basics of anatomy and physiology
    a. Body cavities
    b. Cardiovascular (circulatory) system
    c. Digestive system
    d. Endocrine system
    e. Genitourinary system
    f. Homeostasis
    g. Integumentary system
    h. Muscular system
    i. Nervous system

COURSE CONTENT CHECKLIST (cont.)

Page No.	County Use

j. Respiratory system

k. Skeleton system

l. Surface anatomy

m. The cell

n. Tissues

3. Patient assessment

a. Pertinent patient history

b. Physical examination

c. Prioritization of assessment and management

d. Scene assessment

4. Reporting format for presenting patient information

5. Skills Protocols

a. Diagnostic signs

b. Patient assessment

c. Reporting patient information

6. Airway management including

a. Bag/valve systems

b. Demand valves

c. Nasopharyngeal airways

d. Oropharyngeal airways

e. Oxygen administration devices

f. Suctioning and portable suction equipment

g. Chest auscultation

h. Direct laryngoscopy and use of Magill forceps for removal of foreign body

i. Endotracheal intubation (ET)

COURSE CONTENT CHECKLIST (cont.) | Page | County Use

j. Esophageal/Tracheal Airway Device

k. Needle thorascostomy

(1) other skills included within the San Diego EMS EMT-P optional scope of practice

7. Pathophysiology of Shock

a. Acid-base balance

b. Blood and its composition

c. Body fluids and distribution

d. Electrolytes

e. Intravenous solutions

f. Osmosis and diffusion

g. Cardiogenic shock

h. Distributive shock

i. Hypovolemic shock

j. Obstructive shock

k. IV insertion

1) Peripheral

2) External jugular

3) Access indwelling IV devices including AV fistula shunts and heparin locks

l. Pneumatic antishock trousers and associated complications

m. Withdrawal of blood samples

8. General Pharmacology

a. Classifications

b. Factors which affect action, onset of action and duration

c. General drug actions

COURSE CONTENT CHECKLIST (cont.)

Page No. County Use

d. Home medications

e. Routes of administration

f. Terminology

g. Drug dosages

h. Computing dosages

i. Weights and measures

j. Autonomic nerves - Parasympathetic/sympathetic alpha/beta

9. Specific drugs

a. 25% and 50% dextrose

b. activated charcoal

c. aerosolized or nebulized beta-2 specific bronchodilators

d. atropine sulfate

e. bretylium tosylate

f. calcium chloride

g. diazepam

h. diphenhydramine hydrochloride

i. dopamine hydrochloride

j. epinephrine

k. furosemide

l. glucagon

m. heparin

n. isoproterenol

o. lidocaine

p. morphine sulfate

q. naloxone hydrochloride

r. nitroglycerine

COURSE CONTENT CHECKLIST (cont.)

Page No. County Use

s. oxytocin

t. sodium bicarbonate

u. syrup of ipecac

v. terbutaline sulfate

w. verapamil

10. Drug preparation and administration skills

a. Addition of drugs to IV

b. Administration of drugs directly into a vein

c. Administration of drugs through an endotracheal tube (as part of ET skill)

d. Administration of drugs through an IV tubing medication port

e. Inhalation

f. Intramuscular injections

g. Oral

h. Subcutaneous injections

i. Sublingual (not for injection)

j. Sublingual injections

Division 3: Trauma

1. Soft tissue injuries

a. Eye injuries

b. Head and neck injuries

c. Wounds - open and closed

COURSE CONTENT CHECKLIST (cont.)

	Page No.	County Use
d. Bandaging		
e. Control of external hemorrhage		
f. Eye irrigation		
g. Immobilizing impaled objects		
h. Impaled objects including removal of impaled object in cheek		
i. Pneumatic antishock trousers		
2. Musculoskeletal Injuries		
a. Fractures		
b. Dislocations		
c. Sprains and strains		
d. Pneumatic antishock trousers		
e. Rigid splint		
f. Sling and swathe		
g. Traction splint		
3. Chest Trauma		
a. Hemothorax		
b. Impaled objects		
c. Myocardial and great vessel trauma		
d. Pneumothorax and tension pneumothorax		
e. Rib fractures and flail chest		
f. Needle thoracostomy		
4. Abdominal Trauma		
5. Head and Spinal Cord Trauma		
a. Cervical immobilization		

COURSE CONTENT CHECKLIST (cont.)

Page No. County Use

b. Helmet removal

c. spinal immobilization

6. Multisystem Injuries

7. Burns

Division 4: Medical Emergencies

1. Respiratory System
   a. Composition of gases in the environment
   b. Exchange of gases in the lung
   c. Regulation of respiration
   d. Respiration patterns
   e. Respiratory distress
   f. Asthma and chronic obstructive pulmonary disease
   g. Cerebral and brain stem dysfunction
   h. Dysfunction of spinal cord, nerves or respiratory muscles
   i. Hyperventilation syndrome
   j. Pneumonia
   k. Pulmonary embolism
   l. Spontaneous pneumothorax
   m. Upper airway obstruction
   n. Acute pulmonary edema
   o. Near drowning
   p. Toxic inhalations
2. Cardiovascular System - Anatomy and Physiology
   a. Cardiac conduction system
   b. Cardiac cycle

COURSE CONTENT CHECKLIST (cont)

	Page No.	County Use
e. Nervous control		
f. Components of the electrocardiogram record		
g. Electrophysiology		
h. Identifying normal sinus rhythm		
i. Dysrhythmia recognition, to include prehospital management		
1) Artifact		
2) Artificial pacemaker rhythms		
3) Atrial fibrillation		
4) Atrial flutter		
5) Cardiac standstill (asystole)		
6) Electromechanical dissociation		
7) First degree atrioventricular block		
8) Idioventricular rhythm		
9) Junctional rhythm		
10) Premature atrial contractions		
11) Premature junctional contractions		
12) Premature ventricular contractions		
13) Second degree atrioventricular block		
14) Sinus arrhythmia		
15) Sinus bradycardia (with hypotension)		
16) Sinus tachycardia		
17) Supraventricular tachycardia		
18) Third degree atrioventricular block		
19) Ventricular fibrillation		
20) Ventricular tachycardia		
j. Aortic aneurysm		

COURSE CONTENT CHECKLIST (cont.)

	Page No.	County Use
k. Cardiogenic shock		
l. Congestive heart failure		
m. Coronary artery disease, angina and acute myocardial infarction		
n. Hypertensive emergencies		
o. Advanced cardiac life support (ACLS) megacode modified for field situation		
p. Basic cardiac life support (BCLS)		
q. Cardiac monitoring		
r. Defibrillation and synchronized cardioversion		
s. Dysrhythmia recognition of the rhythms listed in subsection (2)(C)		
t. Vagal maneuvers, specifically, valsalva maneuvers		
3. Endocrine Emergencies		
a. Diabetes		
b. Glucose Monitoring		
4. Nervous System		
a. Autonomic nerves		
b. Brain and spinal cord		
c. Peripheral nerves		
d. Coma		
e. Seizures		
f. Stroke		
g. Syncope		

COURSE CONTENT CHECKLIST (cont.)

	Page No.	County Use

5. Acute Abdomen, Genitourinary and Reproductive Systems
   a. GI bleeding
   b. Diseases of genitourinary and reproductive systems
6. Anaphylaxis
7. Toxicology, Alcoholism and Drug Abuse
8. Infectious and Communicable Diseases
9. Environmental Emergencies
   a. Compressed air diving injuries and illnesses
   b. Mountain sickness and other high altitude syndromes
   c. Lightning and other electrical injuries
   d. Poisonous and nonpoisonous bites and stings
   e. The atmospheric and thermal environment and the physiology of temperature regulation
   f. Cold exposure
   g. Heat exposure
   h. Thermal injuries and illnesses
   i. Application of constricting bands
   j. Snake bite kit
10. Pediatrics
    a. Approach to parents and child
    b. Growth and development
    c. Cardiopulmonary arrest
    d. Child abuse/neglect
    e. Altered level of consciousness

COURSE CONTENT CHECKLIST (cont.)

	Page No.	County Use
f. Common communicable diseases (childhood illnesses)		

g. Meningitis

h. Seizures

i. Near drowning

j. Poisoning

k. Allergic reactions/anaphylaxis

l. Asthma/bronchitis

m. Epiglottitis

n. Foreign body aspiration

o. Pneumonia

p. Tracheobronchitis (croup)

q. Sudden infant death syndrome

r. Trauma, including shock

s. Airway adjuncts utilized for neonates, infants and children

t. Child resuscitation

u. Cooling measures

v. Infant resuscitation

w. IV techniques

Division 5: Obstetrical, Gynecological, and Neonatal Emergencies

1. Anatomy and physiology of the female reproductive system.

2. Normal childbirth. The stages of labor and normal delivery, including assessment and management.

3. Obstetrical emergencies. Pathophysiology, specific patient assessment, associated complications

and the prehospital management of obstetric emergencies to include:

a. Abnormal fetal presentation.

b. Abortion

c. Abruptio placenta

d. Breech birth

e. Failure to progress

f. Multiple birth

g. Placenta previa

h. Post partum hemorrhage

i. Premature birth

j. Prolapsed cord

k. Ruptured ectopic pregnancy

l. Supine hypotension syndrome

m. Toxemia of pregnancy.

4. Gynecological emergencies. pathophysiology, specific patient assessment, associated complications, and the prehospital management of gynecologic emergencies to include:

a. Pelvic inflammatory disease

b. Ruptured ovarian cyst

c. Vaginal bleeding

5. The neonate. Specific patient assessment, and the prehospital management of the neonate to include:

a. APGAR scoring

b. Resuscitation

c. Temperature regulation

COURSE CONTENT CHECKLIST (cont.)

	Page No.	County Use
6. Skills protocols		
a. Assisting with breech delivery		
b. Assisting with normal deliveries, to include care of the newborn		
c. Management of the prolapsed cord		
d. Neonatal resuscitation		
Division 6: Special Patient Problems		
1. Behavioral Emergencies		
a. Emotional crisis		
b. Substance abuse		
c. Victims of assault, to include sexual assault		
d. Use of community resources		
e. Application of restraints		
f. Management of difficult patient situations		
g. Behavioral responses to injury, illness, death and dying		
2. Assault Victims		
3. Geriatric Patients		
4. Disabled Patients		
5. Obstetrical, Gynecological, Emergencies		
a. Abnormal fetal presentation		
b. Abortion		
c. Abruptio placenta		
d. Breech birth		

COURSE CONTENT CHECKLIST (cont.)

Page No. County Use

e. Failure to progress

f. Multiple birth

g. Placenta previa

h. Post partum hemorrhage

i. Premature birth

j. Prolapsed cord

k. Ruptured ectopic pregnancy

l. Supine hypotension syndrome

m. Toxemia of pregnancy

n. Normal birth

o. Pelvic inflammatory disease

p. Ruptured ovarian cyst

q. Vaginal bleeding

r. The neonate

6. Neonatal Emergencies

a. APGAR scoring

b. Resuscitation

c. Temperature regulation

d. Skills protocols

e. Assisting with breech delivery

f. Assisting with normal deliveries, to include care of the newborn

g. Management of the prolapsed cord

SUBJECT: PARAMEDIC TRAINING PROGRAM REQUIREMENTS AND PROCEDURES FOR APPROVAL/REAPPROVAL **Date: 07/01/05**

I. Authority: Health and Safety Code, Section 1797.208, Division 2.5.

II. Purpose: To establish a mechanism for application and approval/reapproval of Paramedic training programs in the County of San Diego.

III. Policy:

A. All Paramedic training programs must meet requirements as set forth in the California Code of Regulations, Title 22, Division 9, Chapter 4.

B. All Paramedic training programs must go through the process of licensing and accreditation through the Commission on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP) and maintain such accreditation for reaccreditation in the County of San Diego.

C. All Paramedic training programs must have approval from San Diego County Emergency Medical Services (EMS) prior to the program being offered.

D. Program approval shall be for two years following the effective date of approval, and may be renewed every two years subject to the procedure for program approval.

E. All approved Paramedic training programs shall be subject to periodic review by EMS and may also be reviewed by the State of California EMS Authority. This review may involve periodic review of all program materials, and periodic on-site evaluations.

F. Noncompliance with any criterion required for program approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of Title 22, Division 9, Chapter 4 of the California Code of

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Administration **Medical Director**

Regulations may result in suspension or revocation of program approval by EMS. An approved Paramedic training program shall have no more than 60 days from date of written notice to comply with the regulations.

IV. Procedure:

A. To receive initial program approval, all requesting Paramedic training programs shall submit proof of accreditation and all materials requested on the "CHECK LIST: PARAMEDIC TRAINING PROGRAM APPLICATION" (see attached).

B. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time after receipt of all required documentation. This period of time shall not exceed three months.

C. EMS shall establish the effective date of program approval in writing upon the satisfactory documentation of compliance with all program requirements.

IV. Program Renewal

A. Submit approval from CoAEMSP with letter of intent to continue to offer Paramedic training.

B. Submit any changes in staff or training location.

Approved:

Administration **Medical Director**

SUBJECT: GUIDELINES FOR PLACEMENT OF PARAMEDIC INTERNS IN SAN DIEGO COUNTY

Authority: Health and Safety Code, Division 2.5, Sections 1797.208, 1797.210.

Purpose: To assist with the clinical and field internship placement of paramedics trained in agencies outside of San Diego County and to enable the quality management of paramedic internships.

Policy:

A. All paramedic students trained in agencies outside of San Diego County, who will seek an internship with a San Diego County Paramedic Agency will submit the completed Application for Internship Placement form accompanied by the following documentation as well as obtain an out-of-county trained intern number for use in the QCS:

1. Proof of completion of didactic portion of the paramedic-training program.
2. Proof of five medically supervised intubations during clinical training.
3. Proof of completion of the Paramedic Local Accreditation class.
4. Copy of current ACLS card.
5. Current CPR card.
6. Current EMT-1 certification.

B. All Out-of-County Paramedic Training Agencies seeking to place students in San Diego shall contact County of San Diego, EMS Branch to notify of potential student placement in San Diego County.

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Carmel Angelo — **Administration**

EMS Medical Director

SUBJECT: GUIDELINES FOR PLACEMENT OF PARAMEDIC INTERNS IN SAN DIEGO COUNTY

1. Call the County of San Diego, EMS office, (619-285-6429) to speak with the Training Agency Coordinator to verify availability for internship placement in the County.
2. Supply a fully executed copy of a contract with the provider agency/hospital that will be accommodating the paramedic intern. This contract will outline the process for monitoring the paramedic intern as well as the process that will be followed should it be necessary to terminate the internship.
3. List on training agency letterhead, the name(s) of the student(s), the Provider agency/hospital in which the internship will be done, the name(s) of the preceptor(s) and the training agency contact information for all instructors who will be involved with intern(s) placed in San Diego County.

Approved:

Administration **EMS Medical Director**

SUBJECT: MOBILE INTENSIVE CARE NURSE -- AUTHORIZATION/REAUTHORIZATION

Date: 07/01/04

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.56, 1797.213, and 1797.214.

II. Purpose: To define the process of Mobile Intensive Care Nurse (MICN) authorization and reauthorization.

III. Policy: To become authorized as a MICN in San Diego County, the following requirements must be met:

A. Authorization process:

1. The candidate for initial authorization must:

a. Be a Registered Nurse currently licensed in the State of California.

b. Possess a current ACLS course completion card.

c. Have received instruction in the following subjects pertinent to the MICN role (recommended minimum 30 hours of training).

(1) The MICN in the emergency medical service (EMS) system.

(2) Field assessment and reporting.

(3) Shock.

(4) Pharmacology.

(5) Respiratory emergencies.

(6) Cardiac emergencies.

(7) Neurological emergencies.

(8) Soft tissue emergencies.

(9) Musculoskeletal emergencies.

(10) Other medical emergencies.

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Administration **Medical Director**

(11) Obstetric emergencies.

(12) Pediatric emergencies.

(13) Geriatric emergencies.

(14) Behavioral emergencies.

(15) Multiple trauma and triage.

(16) San Diego County Policies, Procedures and Protocols.

d. Complete and submit proof of an internship consisting of:

(1) A Base Hospital orientation which includes the observation of paramedic functions on a minimum of three Paramedic responses which demonstrate advanced life support (ALS) skills.

(2) Observation of medical direction of patient care via direct voice communication with field personnel by a MICN/Base Hospital Physician for a minimum of 10 Paramedic calls under the supervision of the Base Hospital Nurse Coordinator or designee.

e. Successfully pass the MICN authorization examination, by predetermined standards, approved by the County of San Diego EMS Medical Director. If unsuccessful, the candidate may repeat the exam twice. If unsuccessful after three test sessions, the candidate must complete a remedial course of instruction prior to retest.

f. Submit an application form containing a statement that the individual is not precluded from authorization for reasons defined in Section 1798.200 of

the Health and Safety Code, proof of internship, documentation of successful completion of MICN Exam, and the established fee for testing and/or authorization.

2. Authorization periods shall end on either March 31 or September 30 of each year, up to, but not exceeding, 2 full years from the date of issue.

B. Reauthorization Process:

1. To be eligible for reauthorization, a currently authorized MICN shall:

a. Submit a completed San Diego County EMS application form and pay the established fee.

b. Provide documentation of attendance of 24 hours of multi-disciplinary prehospital continuing education, approved by a Base Hospital or the San Diego County EMS Agency, every 2 years. The course objectives for these courses shall be directly related to the MICN role. Course content may include, but is not limited to, case-based presentations, trends in prehospital care, protocol and policy review, and current concepts in prehospital care. Participation in courses with nationally standardized curricula, such as ACLS, PALS, PEPP or TNCC, do not qualify for MICN reauthorization credit.

2. Individuals who have let their MICN authorization lapse shall be eligible for reauthorization upon completion of the following:

a. For a lapse of less than 90 days, the applicant must meet the requirements of Section III. B.1, a & b of this policy.

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b. For a lapse of greater than 90 days, but less than one year, the applicant must additionally meet the requirements of Section III. A. 1. d. (2). of this policy.

c. For a lapse of greater than one year, the applicant must additionally meet the requirement in Section III. A. 1. e. of this policy.

3. The Division of EMS reserves the right to require periodic mandatory training on new skills, protocols and policies or remedial training as a condition of continued authorization.

4. The Division of EMS reserves the right to withdraw or retract authorization pending resolution of disciplinary issues in accordance with local policy.

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Administration **Medical Director**

SUBJECT: PARAMEDIC ACCREDITATION **Date: 01/01/2005**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.185 and 1797.214.

II. Purpose: To establish a mechanism for a paramedic to become accredited to practice in San Diego County.

III. Definition: Accreditation is authorization by the Medical Director of the San Diego County Emergency Medical Services (EMS) agency to practice paramedic skills within a specific jurisdiction as required by a specific local EMS agency. Accreditation allows local EMS agencies to ensure that paramedics are trained in the optional skills and oriented to the local system.

IV. Policy: A paramedic must be accredited by the County of San Diego, Health and Human Services Agency, Emergency Medical Services Branch (EMS) in order to practice as a paramedic in San Diego County.

A. In order to be eligible for initial accreditation an individual shall:

1. Possess a current, valid California paramedic license.

2. Complete and submit an application for accreditation to EMS.

3. Successfully complete an accreditation workshop as prescribed by EMS. This workshop shall not be less than six (6) hours nor exceed 12 hours in length, and will include:

a. Orientation to the local EMS system policies, procedures and protocols, radio communications, hospital/facility destination policies/practices, and other unique system features.

b. Training and/or testing in any optional procedures authorized by the San Diego County EMS Medical Director, in which the individual has not been trained or tested.

4. Provide documentation of training or testing from another jurisdiction for local optional scope items.

5. Pay the established accreditation fee to EMS.

6. Possess a current ACLS course completion card.

B. Initial accreditation shall be effective for two years, or until the expiration date of the California paramedic license, whichever is earlier.

a. If the paramedic accreditation applicant does not complete accreditation requirements within thirty calendar days, then the applicant must complete a new application and pay a new fee to begin another thirty-day period.

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Administration **EMS Medical Director**

b. A paramedic may apply for initial accreditation no more than three times in a twelve -month period.

C. Provisional Accreditation

1. Paramedics who have completed all requirements for initial accreditation other than the orientation requirement (IV.A.3. above) may be accredited on a provisional basis for up to 90days pending the completion of the San Diego County Accreditation Workshop.

2. Provisional accreditation may be extended only with special authorization from the San Diego County EMS Medical Director.

3. Provisional accreditation status shall be allowed only once for a paramedic.

4. Individuals with provisional accreditation must:

   a. Work solely within the California paramedic Scope of Practice.

   b. Work as a second paramedic, only with a fully accredited (non-provisional) San Diego County paramedic.

D. Continued accreditation (re-accreditation).
Accreditation to practice shall be continuous as long as EMS requirements are met. These requirements are as follows:

1. Possession of a valid California paramedic license, **and**

2. Maintenance of current ACLS training (every two years).

E. Accreditation Lapse
Individuals who have allowed their paramedic accreditation to lapse for greater than one year shall, in addition to the requirements listed above in Section IV. D, successfully complete the examination portion of the Accreditation Workshop and pay the established accreditation fee to EMS.

F. EMS shall notify individuals applying for accreditation of the decision to accredit within 30 days of submission of a complete application.

G. EMS shall submit the names and dates of accreditation of all individuals it accredits to the EMS Authority, within twenty working days of accreditation.

H. During an interfacility transfer, an individual who is accredited as a paramedic in one jurisdiction may utilize the paramedic scope of practice in another jurisdiction according to the policies and procedures established by the accrediting local EMS agency.

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Administration **EMS Medical Director**

I. During a mutual aid response into another jurisdiction, a paramedic may utilize the paramedic scope of practice according to the policies and procedures established by the accrediting local EMS agency.

J. EMS reserves the right to require periodic mandatory training on new skills, training on new or revised protocols, or remedial training as a condition of continued accreditation.

K. EMS reserves the right to withdraw or restrict accreditation pending resolution of disciplinary issues, in accordance with state disciplinary regulations and local policy.

Approved:

Administration **EMS Medical Director**

SUBJECT: DESIGNATION OF AUTHORIZED EMERGENCY MEDICAL SERVICES CONTINUING EDUCATION PROVIDERS **Date: 01/01/2005**

I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.214, 1797.220,

II. **Purpose**: To establish a mechanism by which providers of continuing education may be designated an "authorized provider" of emergency medical services (EMS) continuing education (CE) in San Diego County.

III. **Definition**: Authorized Emergency Medical Services (EMS) Provider of Continuing Education (CE) – Authorized EMS Provider of CE means an individual or organization who meets the requirements of California Code Of regulations (CCR), Title 22, Chapter 11, and is approved to conduct continuing education courses, classes, activities or experiences, and to issue earned continuing education hours to EMS Personnel for the purposes of maintaining certification/licensure or re-establishing lapsed certification or licensure within the state of California.

IV. **Policy**: The County of San Diego, Health and Human Services Agency, Emergency Medical Services Branch (EMS) will approve, for the purposes of recertification, relicensure, reaccreditation, or reauthorization, those CE activities sponsored by providers who are designated by EMS as authorized providers of CE and who comply with San Diego County policies, procedures, and guidelines for EMS CE providers.

A. In order to become designated as an authorized provider of EMS CE in San Diego County, applicants must:

1. Complete an application form and submit it, with appropriate documentation and fees, to County of San Diego EMS at least sixty days

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prior to the date of the first educational activity. San Diego County Base Hospitals are exempt from the fee. The form must indicate whether the applicant is applying for approval to offer courses for basic life support (BLS) personnel and/or advanced life support (ALS) personnel or both.

2. Agree to comply with all guidelines pertaining to authorized EMS CE providers. For all providers, these guidelines are described in the County of San Diego EMS Guidelines for Authorized Emergency Medical Services Continuing Education Provider manual, available at the San Diego County EMS office.

3. Provider applicants must designate the certification level(s) of their intended CE participants (ALS or BLS). Approval may be granted for only one certification level (BLS versus ALS/BLS) if the applicant cannot document their ability and resources to provide CE at all levels. This approval level may be adjusted after initial approval provided that the authorized provider can demonstrate that it has the requisite equipment and materials to provide this education in accordance with the guidelines.

B. San Diego County EMS shall approve or disapprove the CE request within 60 days of receipt of the completed request.

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Administration **EMS Medical Director**

1. Within fourteen working days of receipt of a request for approval, EMS will notify the CE provider that the request has been received, and shall specify what information is missing, if any.
2. If the request is approved, EMS will issue a CE provider number.
3. If the request is denied, EMS will notify the applicant in accordance with in accordance with applicable provisions of CCR, Title 22, Chapter 11.

C. Designation as an authorized provider shall be for a four-year period, after which each provider must reapply. To maintain continuous approval the renewal application must be submitted at least sixty days prior to the CE provider expiration date.

D. Authorized providers are subject to periodic reviews of course outlines, attendance records, instructor qualifications, or other material pertaining to courses presented by the provider for CE credit. County of San Diego EMS staff will conduct these reviews.

E. Noncompliance with any criterion required for CE provider approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of state or local regulations may result in denial, probation, suspension or revocation of CE provider approval by San Diego County EMS, in accordance with CCR, Title 22, Chapter 11.

Approved:

Administration **EMS Medical Director**

SUBJECT: CONTINUING EDUCATION FOR PREHOSPITAL PERSONNEL **Date:01/01/2005**

I. Authority: Health & Safety Code Section 1797.214, 1797.220,

II. Purpose: To identify the scope and role of the San Diego County emergency medical services (EMS) continuing education (CE) program for prehospital personnel.

III. Policy:

A. The CE program for prehospital personnel shall be recognized as an important link in the San Diego County system-wide quality improvement process, and will receive oversight from the EMS Medical Director (or designee).

B. The CE program shall be implemented in accordance with Title 22, Division 9, Chapter 11 of the California Code of Regulations.

C. Within the requirements of San Diego policies regarding Paramedic accreditation, EMT-B certification, and MICN authorization, the San Diego County Division of EMS will accept CE activities approved by other California local EMS agencies (or through their approved providers of CE), for recertification/authorization/accreditation purposes or re-establishing lapsed certification or licensure.

D. San Diego County EMS shall publish and maintain the Guidelines For Authorized Providers of Continuing Education For Personnel in San Diego County manual and make that manual available to approved providers and potential providers. The manual shall identify the requirements for the provider designation and renewal process, guidelines for qualifications of program personnel, specific guidelines for course approval, and other material specific to designated CE providers.

E. EMS shall maintain a list of current approved CE providers, including the contact person for the program, approval issue date and expiration date, and assigned provider number.

F. CE activities offered by San Diego EMS approved providers, in accordance with San Diego

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guidelines, shall be considered to be "approved" by San Diego EMS.

G. In addition to approval for CE activities presented by approved providers, EMS may, at its discretion, award CE credits for other activities not presented by approved providers. These include (but are not limited to) the following:

1. Nationally Recognized Curricula. - Programs offered using nationally recognized curricula, such as the Red Cross/Heart Association CPR-C program, Prehospital Trauma Life Support (PHTLS), or ACLS may be utilized for recertification/licensure purposes regardless of the provider's CE Providership status.). It will be the responsibility of the participant to maintain a course completion record and course outline that indicates the total hours of the individual's participation (in activities relevant to the individual's level) for audit purposes.
2. National Standard Curriculum refers to the curricula developed under the auspices of the United States Department of Transportation, National Highway Traffic Safety Administration for the specified level of training of EMS Personnel.

H. The EMS Division will not pre-authorize course outlines from non-approved CE Providers to determine their possible acceptance for recertification purposes. Nationally recognized curricula presented by non-providers may be accepted and approved by the County, but individual courses, conferences, or other activities will not be recognized if they are not sponsored and approved by an authorized provider.

I. EMT-Bs who have attended courses from non-providers (except in the case of a course using a nationally recognized course curriculum) must submit ALL OF THE FOLLOWING AT THE TIME OF RECERTIFICATION/REACCREDITATION if they wish recertification credit:

1. Title of course, name of instructor, location, and telephone number of presenter

2. Date of course, course outline, course learning objectives and a copy of course evaluation form
3. The number of hours of information/experience relevant to EMT-B activities.

EMT-Bs should be informed that there is no guarantee of acceptance of these courses for recertification. EMT-Bs are reminded that extra activities may be required for recertification if the hours from a non-provider are rejected by the Division.

J. EMS will NOT review individual courses offered by non-approved providers for Paramedic CE credit. Paramedics wishing credit for activities sponsored by organizations located in California counties other than San Diego County should contact that county's local EMS agency. Paramedics should contact the California EMS Authority for information on approval for courses offered by providers from out of state.

K. EMS maintains the authority to approve continuing education activities, which may exceed the scope of the CE Guidelines Manual published by EMS. Any such determination by EMS is solely at its discretion.

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Administration **EMS Medical Director**

SUBJECT: PUBLIC SAFTY AUTOMATED EXTERNAL DEFIBRILLATOR TRAINING PROGRAM STUDENT ELIGIBILITY **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170**,** 1797.196, 1797.208 and 1797.214.

II. Purpose: To establish the minimum requirements for Public Safety (PS) Automated External Defibrillator (AED) Training Program student eligibility.

III. Policy: To be eligible to enter an approved PS AED Training Program, an individual shall meet all the following requirements:

A. Successfully complete an approved Public Safety First-Aid Course.

B. Possess a current CPR Card (Health Care Provider/Professional Rescuer or equivalent).

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Administration **Medical Director**

SUBJECT: PUBLIC SAFETY AUTOMATED EXTERNAL DEFIBRILLATOR TRAINING PROGRAM REQUIREMENTS **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.206, 1797.208 and 1797.214, California Code of Regulations, Title 22, Chapter 1.5, Sections 100020, 100021.

II. Purpose: To establish standardized Public Safety (PS) Automated External Defibrillator (AED) curriculum and program approval requirements.

III. Policy:

A. San Diego County Emergency Medical Services (EMS) shall approve PS AED Training Programs.

B. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time, not to exceed thirty (30) days, after receipt of all required documentation.

C. Program approval shall be renewed every four (4) years.

IV. Procedure:

A. The requesting training agency shall submit to EMS the following materials to be considered for program approval:

1. Outline and objectives for the minimum four (4) hour PS AED training course, to include:

   a. Proper use, maintenance and periodic inspection of the automated external defibrillator (AED).

   b. The importance of defibrillation, advanced life support (ALS), adequate airway care, and internal emergency response system, if applicable.

Approved:

Administration **Medical Director**

c. Overview of the EMS system, the local EMS system's medical control policies, 9-1-1 access, and interaction with EMS personnel.

d. Assessment of an unconscious patient, to include evaluation of airway, breathing, and circulation to determine cardiac arrest.

e. Information relating to AED safety precautions to enable the individual to administer a shock without jeopardizing the safety of the patient or rescuers or other nearby persons.

f. Recognition that an electrical shock has been delivered to the patient and that the AED is no longer charged.

g. Rapid, accurate assessment of the patient's post-shock status.

h. The appropriate continuation of care following a successful defibrillation.

Approved:

Administration **Medical Director**

SUBJECT: PUBLIC SAFETY AUTOMATED EXTERNAL DEFIBRILLATOR ACCREDITATION **Date: 07/01/05**

I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.208, 1797.210, 1797.214, 1797.220, 1798.102 and 1798.104.

II. **Purpose:** To establish the requirements for Public Safety (PS) Automated External Defibrillator (AED) accreditation in San Diego County.

III. **Policy:** Public Safety personnel must be accredited by San Diego County Emergency Medical Services (EMS) in order to use the Automated External Defibrillator (AED) skill in San Diego County.

A. To become PS AED accredited in San Diego County, the following criteria must be met:

1. Possess a current CPR card (Health Care Provider/Professional Rescuer or equivalent).
2. Possess documentation of successful completion of an approved Public Safety First Aid Course.
3. Possess a valid PS AED Course Completion record from an approved PS AED Training Program.
4. Be affiliated with an approved PS AED agency in San Diego County.

B. The following continuing education **(**CE) requirements must be met to maintain PS AED accreditation:

1. Demonstrate skills proficiency annually, at a minimum.
2. Adherence to the CE requirements rests on the Physician Medical Director or designee to which the accredited PS AED is assigned.

C. Deactivation/Reactivation Process:

Approved:

Administration **Medical Director**

1. PS AED accreditation will become inactive for:
    a. Failure to comply with CE requirements.
    b. Failure to maintain current CPR card.
    c. No longer affiliated with a PS AED agency.
2. The Physician Medical Director or designee shall be responsible for notifying EMS of PS AED personnel who are placed in inactive status on the first day of the following month.
3. Inactive status due to CE delinquency: The employing agency shall be responsible for notifying the employee and assuring inactive status until the CE delinquency is resolved and verified by the Physician Medical Director or designee.
4. Inactive status due to failure to maintain certification(s):
    a. Employing agency shall monitor status of employee certification(s).
    b. Employing agency shall notify the Physician Medical Director or designee of the agency of inactive status due to lapse in certification(s).
    c. The employing agency shall be responsible for notifying the employee and assuring inactive status until certification issue(s) resolved.
5. Reactivation Process:
    a. A PS AED on inactive status may be reactivated by fulfilling the following requirements:

1) Inactive status due to CE delinquency -- shall be resolved to the satisfaction of the Physician Medical Director or designee.

2) Inactive status due to failure to maintain current First Aid/CPR certification--submit proof of current PS First Aid/CPR certification/training to employer.

b. The Physician Medical Director or designee shall be responsible for notifying EMS of PS AED personnel who are removed from inactive status on the first day of the following month.

Approved:

Administration **Medical Director**

SUBJECT: ESOPHAGEAL TRACHEAL AIRWAY DEVICE **Date: 07/01/05**
TRAINING PROGRAM REQUIREMENTS EMT-BASIC

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.206, 1797.208, 1797.214 and 1797.218.

II. Purpose: To establish a standardized Esophageal Tracheal Airway Device (ETAD) curriculum and program approval requirements.

III. Policy:

A. San Diego County Emergency Medical Services (EMS) shall approve ETAD Training Programs.

B. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time, not to exceed 30 days after receipt of all required documentation.

C. Program approval shall be renewed every four years.

IV. Procedure:

The requesting training agency shall submit to EMS the following materials to be considered for program approval:

A. Documentation of current EMT-Basic program approval from EMS.

B. Curriculum course outline and objectives for the five hour ETAD training program, to include:

1. Anatomy and physiology of the respiratory system.

2. Assessment of the respiratory system.

Approved:

Administration **Medical Director**

3. Review of basic airway management techniques, which includes manual and mechanical.

4. The role of the esophageal-tracheal airway device in the sequence of airway control.

5. Indications and contraindications of the esophageal-tracheal airway device.

6. The role of pre-oxygenation in preparation for the esophageal-tracheal airway device.

7. Esophageal-tracheal airway device insertion and assessment of placement.

8. Methods for prevention of basic skills deterioration.

9. Alternatives to the esophageal-tracheal airway device.

10. A competency-based written and skills examination for airway management which shall include the use of basic airway equipment and techniques and use of the esophageal-tracheal airway device.

C. List of equipment to be used for skills training.

D. Documentation of access to equipment for skills training in sufficient quantities to meet 1:10 teacher/student ratio.

Approved:

Administration **Medical Director**

SUBJECT: ESOPHAGEAL TRACHEAL AIRWAY DEVICE **Date: 07/01/03**
TRAINING PROGRAM REQUIREMENTS EMT-Basic

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.206, 1797.208, 1797.214 and 1797.218.

II. Purpose: To establish a standardized Esophageal Tracheal Airway Device (ETAD, or "Combitube®") curriculum and program approval requirements.

III. Policy:

A. San Diego County, Division of Emergency Medical Services (EMS) shall approve ETAD Training Programs.

B. Program approval or disapproval shall be made in writing by the Health and Human Services Agency, Division of EMS to the requesting training program within a reasonable period of time, not to exceed 30 days, after receipt of all required documentation.

C. Program approval shall be renewed every four years.

IV. Procedure:

The requesting training agency shall submit to the Division of EMS the following materials to be considered for program approval:

A. Documentation of current EMT-Basic program approval from County of San Diego, Division of EMS.

B. Curriculum course outline and objectives for the five hour ETAD training program, to include:

1. Anatomy and physiology of the respiratory system.

2. Assessment of the respiratory system.

3. Review of basic airway management techniques, which includes manual and mechanical.

4. The role of the esophageal-tracheal airway device in the sequence of airway control.

5. Indications and contraindications of the esophageal-tracheal airway device.

Approved:

Administration **Medical Director**

6. The role of pre-oxygenation in preparation for the esophageal-tracheal airway device.

7. Esophageal-tracheal airway device insertion and assessment of placement.

8. Methods for prevention of basic skills deterioration.

9. Alternatives to the esophageal-tracheal airway device.

10.Acompetency-based written and skills examination for airway management which shall include the use of basic airway equipment and techniques and use of the esophageal-tracheal airway device.

C. List of equipment to be used for skills training.

D. Documentation of access to equipment for skills training in sufficient quantities to meet 1:10 teacher/student ratio.

Approved:

Administration **Medical Director**

SAN DIEGO COUNTY EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL

No. B-326
Page: 1 of 1

SUBJECT: ESOPHAGEAL TRACHEAL AIRWAY DEVICE STUDENT ELIGIBILITY EMT-BASIC

Date: 07/01/05

I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.107, 1797.170,1797.214 and 1797.220.

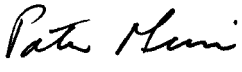
II. **Purpose:** To establish the minimum requirements for Esophageal Tracheal Airway Device (ETAD) Training Program student eligibility.

III. **Policy:** To be eligible to enter an approved ETAD Training Program, an individual shall meet the following requirements:

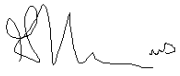
A. Possess current State of California EMT-Basic Certification.

B. Possess a current CPR card (Health Care Provider/Professional Rescuer or equivalent).

Approved:



Administration



Medical Director

SUBJECT: ESOPHAGEAL TRACHEAL AIRWAY DEVICE ACCREDITATION **Date: 07/01/05**
EMT-BASIC

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.208, 1797.214, 1797.220, 1798.102 and 1798.104.

II. Purpose: To establish the requirements for accreditation as an EMT Basic in the use of Esophageal Tracheal Airway Device (ETAD).

III. Policy: A certified EMT Basic (EMT-B) must be accredited by the County of San Diego Emergency Medical Services (EMS) in order to use the ETAD skill in San Diego County.

A. To become accredited in the use of the ETAD in San Diego County, the following criteria must be met:

1. Possess a current State of California EMT-B Certificate.
2. Possess a current CPR card (Health Care Provider/Professional Rescuer or equivalent).
3. Successfully complete an ETAD course approved by the County of San Diego EMS Medical Director.

B. Accreditation shall be valid for as long as the following criteria are met:

1. Current State of California EMT-B Certification is maintained.
2. Current CPR card is maintained.
3. The following continuing education (CE) requirements are maintained:
   a. Attend a structured training session from a San Diego County approved CE provider relative to ETAD skills, and demonstrate ETAD skill proficiency a minimum of once every six months.

Approved:

Administration **Medical Director**

b. Skills proficiency shall be documented on an ETAD CE record, and maintained by the authorized ETAD agency or designated base hospital.

C. The ETAD accreditation will become inactive for any of the following:

1. Failure to comply with CE requirements: The provider agency shall be responsible for notifying the employee and assuring inactive status until the CE delinquency is resolved.

2. Failure to maintain current EMT-B Certification.

a. Employing agency shall monitor status of employee certification.

b. Employing agency shall notify the assigned Authorized ETAD Medical Director (AEAMD)/Base Hospital Medical Director (BHMD)/designee of inactive status due to lapse in certification.

a. The provider agency shall be responsible for notifying its employees and assuring inactive status until certification issues are resolved.

3. AEAMD/BHMD/designee shall be responsible for notifying EMS of ETAD personnel who are placed on inactive status on the first day of the month following the delinquency.

D. Reactivation Process: An EMT-B with inactive ETAD accreditation may be reactivated by fulfilling the following requirements:

1. Inactive status due to CE delinquency -- shall be resolved to the satisfaction of the AEAMD/BHMD/ designee.

2. Inactive status due to failure to maintain current EMT-B certification--submit proof of

current certification/training to employer.

3. The AEAMD/BHMD/designee shall be responsible for notifying EMS of ETAD personnel who are removed from inactive status on the first day of the month following the reactivation.

Approved:

Administration **Medical Director**

SAN DIEGO COUNTY EMS AGENCY

APPLICATION FORM

EMERGENCY MEDICAL TECHNICIAN BASIC TRAINING PROGRAM

1. Name of Institution Agency _____

   Street _____

   City _____

   Contact Person _____

   Telephone Number _____ Extension _____

2. Personnel:

   * Program Director ( ) _____

   * Clinical Coordinator ( ) _____

   * Principal Instructor(s) ( ) _____

   ** Teaching Assistants ( ) _____

3. Course Hours:

	Basic Course	Refresher
Didactic/Lab (min. 100 hrs.)	( )	( ) (min. 24 hrs.)
Clinical (min. 10 hrs.)	( ) N/A	

4. Units of Credit: _____

5. Text: _____

* Provide qualifications on appropriate forms for each person.
** Provide list of names and lecture subjects.

SAN DIEGO COUNTY EMS AGENCY

CHECK LIST: EMERGENCY MEDICAL TECHNICIAN-BASIC TRAINING PROGRAM APPLICATION

		CHECK ONE		
	MATERIALS TO BE SUBMITTED	ENCLOSED	TO FOLLOW	FOR COUNTY USE ONLY
1.	Letter to EMT Basic approving authority requesting approval. 100066(a)			
2.	Check list for EMT Basic Program approval.			
3.	Application Form for Program Approval.			
4.	Program Director Qualification Form. 100070(a)			
5.	Program Clinical Coordinator. Qualification Form 100070(b)			
6.	Instructor Qualification Form. 100070(c)			
7.	Teaching Assistant(s) 100070(d) Submit names and subjects assigned to each Teaching Assistant.			
8.	Copy of written agreement with (1 or more) Acute Care Hospital(s) to provide clinical experience. 100068 and/or			
9.	Copy of written agreement with (1 or more ambulance agency(ies) to provide field experience.			
10.	Statement verifying usage of the State EMT Basic curriculum.			
11.	Basic course description, including:			
	a. Statement of course objectives			
	b. At least six (6) sample lesson plans			
	c. Course outline (if different than the State EMT Basic curriculum format).			
	d. Performance objectives for each skill			
	e. At least ten (10) samples of written questions and at least six (6) samples of Skills Examinations used in periodic testing			
	f. Final Examination (written and skills).			
12.	Refresher course description, including:			
	a. Statement of course objectives			
	b. At least six (6) sample lesson plans			
	c. Course outline			
	d. Performance objective for each skill			
	e. At least ten (10) samples of written questions and at least six (6) samples of Skills Examinations used in periodic testing			
	f. Samples of Final Examination ten (10) written and six (6) skills questions.			
13.	Class schedules; places and dates (estimate if necessary) a. Basic Course b. Refresher Course			
14.	Copy of Course Completion Certificate **100079** (basic and refresher)			
15.	Copy of liability insurance on students			
16.	Table of contents listing the required information on this application, with corresponding page numbers. **100066(b) (12)**			

SAN DIEGO COUNTY EMS AGENCY

EMT-BASIC INSTRUCTOR QUALIFICATIONS

Institution: _____

Check One
Program Director _____
Clinical Coordinator ___
Principal Instructor ____
Teaching Assistant _____

1. **Name: _____**

2. **Occupation: _____**

3. **Professional or Academic Degrees Held:**

   a. _____

   b. _____

   c. _____

4. **Professional License Number(s):**

   a. _____

   b. _____

   c. _____

5. **Emergency care related education within the last five (5) years:**

Course Title	School	Course Length	Date Completed
a.			
b.			
c.			

6. **Emergency care related experience (academic or clinical) within the last (5) years:**

Position	Duties	Organization	Dates
a.			
b.			
c.			

7. **On the attached pages, initial to the left each subject this person is assigned to teach.**

Approvals:

_____ Program Director

_____ Clinical Coordinator

SAN DIEGO COUNTY EMS AGENCY
APPLICATION FORM
EMERGENCY MEDICAL TECHNICIAN BASIC TRAINING PROGRAM

6. List of equipment available in sufficient quantities to meet 1:10 student ratios for skills training (attached).

	Equipment	Number Available
a.	CPR mannequins, adult and baby	_____
b.	Airway management equipment	_____
	1. O_2 cylinders	_____
	2. Flowmeter	_____
	3. O_2 masks and nasal cannulas	_____
	4. Suction equipment	_____
	5. Suction tubing	_____
	6. Rigid and flexible suction catheters	_____
	7. Pocket mask	_____
	8. Bag-valve-mask resuscitator	_____
	9. Demand-valve-mask resuscitator (optional)	_____
	10. Oral and nasal airways of various sizes	_____
	11. Combitube	_____
	12. Endotracheal tube	_____
c.	Traction Splint	_____
d.	Extrication device	_____
e.	Backboard, head immobilizer cervical collars	_____
f.	Obstetrical mannequin and OB kit	_____
g.	Tourniquets	_____
h.	Various bandages and splints	_____
i.	IV tubing and solution – Normal Saline	_____
j.	Antishock garment	_____
k.	Cardiac monitor (optional)	_____
l.	Blood pressure cuffs and stethoscopes	_____
m.	Intubation mannequins	_____
n.	AED equipment for training	_____
o.	Examples of medications in current scope	_____

SAN DIEGO COUNTY EMS AGENCY

CHECK LIST: EMERGENCY MEDICAL TECHNICIAN-BASIC TRAINING PROGRAM APPLICATION

		CHECK ONE		
	MATERIALS TO BE SUBMITTED	ENCLOSED	TO FOLLOW	FOR COUNTY USE ONLY
1.	Letter to EMT Basic approving authority requesting approval. 100066(a)			
2.	Check list for EMT Basic Program approval.			
3.	Application Form for Program Approval.			
4.	Program Director Qualification Form. 100070(a)			
5.	Program Clinical Coordinator. Qualification Form 100070(b)			
6.	Instructor Qualification Form. 100070(c)			
7.	Teaching Assistant(s) 100070(d) Submit names and subjects assigned to each Teaching Assistant.			
8.	Copy of written agreement with (1 or more) Acute Care Hospital(s) to provide clinical experience. 100068 and/or			
9.	Copy of written agreement with (1 or more ambulance agency(ies) to provide field experience.			
10.	Statement verifying usage of the State EMT Basic curriculum.			
11.	Basic course description, including:			
	a. Statement of course objectives			
	b. At least six (6) sample lesson plans			
	c. Course outline (if different than the State EMT Basic curriculum format).			
	d. Performance objectives for each skill			
	e. At least ten (10) samples of written questions and at least six (6) samples of Skills Examinations used in periodic testing			
	f. Final Examination (written and skills).			
12.	Refresher course description, including:			
	a. Statement of course objectives			
	b. At least six (6) sample lesson plans			
	c. Course outline			
	d. Performance objective for each skill			
	e. At least ten (10) samples of written questions and at least six (6) samples of Skills Examinations used in periodic testing			
	f. Samples of Final Examination ten (10) written and six (6) skills questions.			

SUBJECT: EMT-BASIC TRAINING PROGRAMS **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.208 and 1797.214.

II. Purpose: To establish a mechanism for application and approval of EMT Basic training programs in San Diego County.

III. Policy:

A. All EMT Basic training programs must meet the requirements of the California Code of Regulations, Title 22, Division 9, Chapter 2, pertaining to EMT Basic training program approval, and the County of San Diego, Emergency Medical Services (EMS) requirements listed in the attached training program application.

B. All EMT Basic training programs must have approval of EMS prior to the program being offered. To receive program approval, requesting training agencies must apply for approval to EMS and submit all materials listed on the "Check List: Emergency Medical Technician Basic Training Program Application".

C. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time after receipt of all required documentation. This period of time shall not exceed three (3) months.

D. EMS shall establish the effective date of program approval, in writing, upon the satisfactory documentation of compliance with all program requirements.

Approved:

Administration **Medical Director**

E. Program approval shall be for four (4) years following the effective date of approval and may be renewed every four (4) years, subject to the procedure for program approval specified in Section C above.

F. All approved EMT Basic training programs shall be subject to periodic review including, but not limited to:

1. Periodic review of all program materials.
2. Periodic on-site evaluation by EMS.

G. All approved training programs shall notify EMS, in writing, in advance, when possible, and in all cases, within thirty (30) days of any change in course content, hours of instruction, course director, and program director or program clinical coordinator.

H. All approved training programs shall report, in writing, the name and address of each person receiving a course completion record and the date of course completion to EMS within fifteen (15) days of course completion.

I. Noncompliance with any criterion required for program approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of the above may result in withdrawal, suspension or revocation of program approval by EMS subject to the provision that an approved EMT Basic training program shall have a reasonable opportunity to comply with these regulations, but in no case shall the time

exceed sixty (60) days from date of written notice to withdraw program approval.

Approved:

Administration **Medical Director**

SUBJECT: EMT-BASIC CERTIFICATION/RECERTIFICATION **Date: 07/01/05**

I. Authority: Health and Safety Code, Sections 1797.170, 1797.175 and 1797.210.

II. Purpose: To establish the requirements for EMT-Basic certification/recertification in San Diego County.

III. Policy:

A. To be eligible for certification as an EMT-Basic in San Diego County, the candidate must meet the following criteria:

1. Initial Certification:

   a. Must be 18 years of age or older.

   b. Must hold a valid EMT-Basic Course Completion Record from an approved EMT-Basic course.

   c. Must hold a current National Registry Card.

   d. Must possess a current CPR Card (Health Care Provider/Professional Rescuer or equivalent).

   e. Must submit to a Livescan or criminal background check from the California Department of Justice for San Diego County, EMS (separate from any agency requirement).

   f. Application for certification must be made within two (2) years of being issued an EMT-Basic Course Completion record.

2. Recertification:

   a. Hold an EMT-Basic Certificate in the State of California that is current.

   b. Successfully complete an approved refresher course within the two (2) years

Approved:

Administration **EMS Medical Director**

prior to application for recertification, or

c. Complete 24 hours of approved continuing education (CE) within two (2) years prior to application for recertification.

d. Present a current CPR Card (Health Care Provider/Professional Rescuer or equivalent).

e. Submit to a Livescan or criminal background check from the California Department of Justice if not yet completed for San Diego County EMS.

f. Submit a complete skills competency verification form.

3. Lapse in Certification:

a. For a lapse within six months, the individual shall comply with the original requirements for re-certification.

b. For a lapse of six months or more, but less then twelve months, the individual shall comply with the original requirements for recertification and complete an additional twelve hours of continuing education for a total of 36 hours of training.

c. For a lapse of twelve months or more, but less than 24 months, the individual shall comply with the original requirements for recertification and complete an additional twenty-four hours of continuing education, for a total of 48 hours of training, and present a current National Registry Card.

d. For a lapse of greater than twenty-four months the individual shall complete an entire EMT-Basic course and comply with the original requirements for initial certification.

Approved:

Administration **EMS Medical Director**

SUBJECT: MANAGEMENT OF CONTROLLED DRUGS **Date: 07/01/05**
ADVANCED LIFE SUPPORT UNITS

I. Authority: California State Board of Pharmacy Business and Professions Code, Section 4019, 4021, California Code of Regulations, Title 22, Division 5, Chapter 5, Section 70001, and D.E.A. 21 Code of Federal Regulations 1301.28.

II. Purpose: To ensure accountability for all controlled drugs and devices issued to advanced life support (ALS) units.

III. Policy: It is the policy of the County of San Diego, Health and Human Services Agency, Emergency Medical Services Branch (EMS) that each ALS unit be assigned to one specific Base Hospital for the purpose of initial stocking of controlled drugs. Agencies, which have a physician in the role of Medical Director, may opt to purchase controlled drugs with Form 222 from a pharmacy, or pharmaceutical supply agency, thereby retaining ownership, accountability and responsibility of those controlled drugs. Agencies, which do not have a Medical Director, may use the County of San Diego, EMS Medical Director to assist with the purchase of controlled drugs (per Policy S 416) if said agency signs a Memorandum of Understanding with the County of San Diego, for the Purchase of Dangerous Drugs and Devices.

IV. Definitions:

Controlled Drug: Pharmaceutical drugs categorized as Category II, III or IV by the Federal Food & Drug Administration.

V. Procedure:

A. Initial Stocking of Unit:

1. Controlled drugs will be issued by the Base Hospital Pharmacy or purchased by the agency physician Medical Director and assigned to its ALS Units according to Drug Enforcement Agency regulations.

Approved:

EMS Medical Director

2. 2. All controlled drugs will be issued in tamper evident containers and must be kept under double lock and key system.

B. Re-supply of Controlled Drugs to Unit:

1. When a controlled drug is used in the field, resupply shall be provided on a one-to-one basis by the Pharmacist of the Receiving Hospital (or designee) or restocked from the purchased agency supply.
   a. Unused drugs must be wasted in the presence of the Emergency Department Registered Nurse and the ALS Personnel.
   b. The hospital controlled drug record information, including the name of the Physician or MICN ordering the drug, must be completed and signed by both the Registered Nurse and the ALS Personnel. If the controlled drug is given under standing orders or communication failure protocols, the Base Hospital Physician on duty shall be listed on the record.
   c. A new tamper evident container will be issued to the ALS Personnel.
2. Drugs that have passed the expiration date or incurred breakage or violation of tamper proof packaging must be replaced by the Pharmacist or designee at the Base Hospital or replaced by the agency physician Medical Director. The broken or out-dated drug must be presented to receive a replacement.
3. Only a currently licensed Paramedic, Physician or Registered Nurse shall sign for replacement drugs. The Paramedic, Physician or R.N. shall show wallet identification card if necessary to verify identity.

C. Controlled Drug Record keeping by ALS Personnel:

1. Each ALS Unit shall maintain a standardized written record of controlled drug

inventory. That record shall be available to the Base Hospital Pharmacist (or designee) for routine inspection, and shall be maintained by the agency for a period of three (3) years in compliance with the State Board of Pharmacy.

2. Drugs shall be inventoried by the ALS Personnel at the beginning and at the conclusion of each shift, and documentation shall include the signatures of the person(s) performing the inventory and noted on the controlled drug inventory.
3. Any time a controlled drug is administered, the name of the drug, the dose administered, the date of administration, the amount wasted, the patient name, the name of the licensed person who is administering the medication, the receiving facility and the QCS run number, if available, shall be documented on the controlled drug inventory.
4. If any medication has been wasted, both the emergency department Registered Nurse and the ALS personnel must sign the controlled drug inventory.
5. Any discrepancy between the written ALS Unit controlled drug inventory and the count of on board drugs shall be noted on the controlled drug inventory sheet and shall be signed by the ALS Team first noting the discrepancy. That discrepancy shall be verbally reported to the assigned Base Hospital Pharmacist (or designee) immediately, followed by written report to the Base Hospital Pharmacist and the Division of Emergency Medical Services within 24 hours.

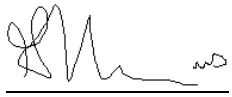
D. Controlled Drug Inspection/Audit of ALS Units:

1. Periodic unannounced inspections or audits of controlled drugs and/or controlled drug inventory shall be conducted no less than four times each year.
2. The ultimate authority for supervision of controlled drugs lies with the Supervising

Inspector of the State Board of Pharmacy. The Supervising Inspector of the State Board of Pharmacy may designate a Deputy Inspector, or a pharmacist located in San Diego County. With the permission of the Supervising Inspector of the State Board of Pharmacy, the pharmacist of the Base Hospital (Pharmacy) may conduct such inspections.

3. The EMS Medical Director or designee may perform announced or unannounced periodic inspections to document compliance with this policy at any time.

Approved:



EMS Medical Director

SUBJECT: Scope of Practice of EMT-Paramedic in San Diego County **Date: 01/01/2005**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.172 and 1798.

II. Purpose: To identify the scope of practice of Paramedics in San Diego County.

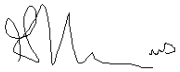
III. Policy:

A. A Paramedic may perform any activity identified in the scope of practice of an EMT-B in Chapter 2 of the California Code of Regulations, Division 9, Title 22.

B. A Paramedic student, or a currently licensed Paramedic affiliated with an approved Paramedic service provider, while caring for patients in a hospital as part of his/her training or continuing education, under the direct supervision of a physician, registered nurse, or physician's assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, may, in accordance with the County of San Diego Emergency Medical Services Branch (EMS) Policies, Procedures and Protocols, perform the following procedures and administer the following medications:

1. Perform defibrillation.
2. Perform synchronized cardioversion.
3. Visualize the airway by use of the laryngoscope and remove foreign body(ies) with forceps.
4. Perform pulmonary ventilation by use of the lower airway multi-lumen adjuncts (esophageal tracheal airway device [ETAD]) and by oral endotracheal intubation (adult and pediatric*).
5. Institute intravenous (IV) catheters, needles or other cannulae (IV lines) in peripheral veins, institute saline locks, and monitor and administer medications through pre-existing vascular access.

Approved:



EMS Medical Director

6. Administer intravenous glucose solutions or isotonic salt solutions.
7. Obtain venous blood samples.
8. Perform Valsalva maneuver.
9. Perform nasogastric intubation* and gastric suction*.
10. Perform needle thoracostomy.
11. Monitor thoracostomy tubes.
12. Perform Intraosseous needle placement
12. Monitor and adjust IV solutions containing Potassium equal to or less than 20mEq/L.
13. Perform blood glucose monitoring test.
14. Administer, using prepackaged products when available, the following medications utilizing the listed routes: intravenous, intramuscular, Intraosseous*, subcutaneous transcutaneous, rectal, sublingual, endotracheal, oral or topical.
    a. 25% and 50% dextrose;
    b. Activated charcoal;
    c. Adenosine;
    d. Albuterol;
    e. Aspirin;
    f. Atropine sulfate;
    g. Atrovent (ipratropium bromide); *
    h. Calcium chloride;
    i. Diphenhydramine;

j. Dopamine hydrochloride;

k. Epinephrine;

l. Furosemide;

m. Glucagon;

n. Lidocaine hydrochloride;

o. Midazolam;

p. Morphine sulfate;

q. Naloxone hydrochloride;

r. Nitroglycerine preparations (excluding IV);

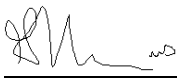
s. Sodium bicarbonate;

t. Pralidoxime chloride (2 PAM Chloride) –requires completion of specialized training.

(Note: Items identified with an asterisk are included as a local optional paramedic intervention, pursuant to CCR Title 22, Div 9, Sec 100145,c, 2)*

15. Perform any prehospital emergency medical care treatment procedure(s) or administer any medication(s) on a trial basis when approved by the medical director of the local EMS agency. Study procedure shall be as defined in Title 22, Division 9, Chapter 4 of the California Code of Regulations.

Approved:



EMS Medical Director

SUBJECT: PREHOSPITAL DETERMINATION OF DEATH **Date: 07/01/06**

I. Authority: Health and Safety Code, Division 2.5, Section 1798.

II. Procedure:

A. When the patient is determined to be "obviously dead", resuscitation measures shall not be initiated.

1. The "obviously dead" are victims who, in addition to absence of respiration and cardiac activity, have suffered one or more of the following:

   - Decapitation
   - Evisceration of heart or brain
   - Incineration
   - Rigor Mortis
   - Decomposition

2. The EMT shall describe the incident and victim's condition on the Prehospital Patient Record clearly stating the reasons that life support measures were not initiated.

B. All patients with absent vital signs who are not "obviously dead" shall be treated with resuscitative measures. Base Hospital Physician may make pronouncement of death by radio communication.

C. In multi-patient incidents, where staffing resources are limited, CPR need not be initiated for arrest victims, however, if CPR has been initiated prior to the arrival of ALS personnel or briefly during assessment, discontinue only if one of the following occurs or is present:

1) Subsequent recognition of obvious death
2) Per BHPO
3) Presence of valid DNR Form/Order, Medallion/Advanced Health Care Directive
4) Lack of response to brief efforts in the presence of any other potentially salvageable patient requiring intervention.

Approved:

EMS Medical Director

D. Except for signs of obvious death, if CPR has been initiated, BLS should be continued while contact is established with the Base Hospital.

1. Once the patient has been pronounced by the Base Hospital Physician, the EMT shall discontinue resuscitative efforts and she/he may contact the Medical Examiner.
2. The EMT shall describe the incident and the patient's condition on the Prehospital Patient Record, clearly stating the circumstances under which resuscitative efforts were terminated, to include the name of the Base Hospital Physician who pronounced the patient, and all available EKG monitoring documentation.
3. Patients placed in an ambulance or undergoing ambulance transport in CPR status may be pronounced by a Base Hospital Physician Order (BHPO). Criteria to pronounce may include:
    a. Medical futility
    b. Latent discovery of a valid DNR
    c. Development of obvious signs of death
    d. Social concerns on scene such as large gatherings, unattended children, highly visible public settings, sensitive family contacts or crew safety or inclement weather, which may require transport of a patient who would otherwise be pronounced on scene.
4. Disposition of patients pronounced in an ambulance:
    a. Deliver the deceased to the closest appropriate BEF and have the deceased logged in as an Emergency Department (ED) patient.
    b. Turn over will be given to the ED staff. The Prehospital Patient Record (PRP) and all personal belongings will be left with the deceased.

c. The receiving facility will assume responsibility for the deceased and contact the coroner, morgue, organ donation facilities if appropriate, and provide any necessary social services for the family.

E. For patients with written, signed "Do Not Resuscitate" orders, follow procedures as established in San Diego County Division of EMS Policy S-414.

Approved:

EMS Medical Director

SUBJECT: Physician on Scene **Date: 07/01/02**

I. Authority: Health and Safety Code, Division 2.5, Sections 1798 and 1798.6.

II. Purpose: To establish a mechanism for prehospital patient care when a Physician-on-Scene offers assistance to the Paramedic.

III. Policy:

The Paramedic may only follow orders from a Base Hospital Physician or authorized RN (MICN).

IV. Procedure:

A. Paramedics to facilitate immediate consultation with Base Hospital Physician by providing radio or phone contact.

B. Base Hospital Physician shall relay information of Attachment A to Physician-on-Scene.

C. If Physician-on-Scene chooses to take total responsibility for the patient.

1. Base Hospital Physician may request proof of State of California licensure to be shown to paramedics.
2. Base Hospital Physician must approve or deny a Physician-on-Scene's request to take total responsibility for patient.
3. The Paramedic may assist the Physician-on-Scene with EMT Basic level skills.
4. Drugs and equipment may be made available for the Physician-on-Scene's use.

D. Paramedic/MICN shall document Physician-on-Scene's name and on scene involvement on the patient care record.

Approved:

Medical Director

ATTACHMENT A

NOTE TO PHYSICIAN ON INVOLVEMENT WITH EMT-PARAMEDICS

An ALS support team (EMT-Paramedic) operates under standard policies and procedures developed by the local EMS agency and approved by their Medical Director under the authority of Division 2.5 of the California Health and Safety Code. The drugs they carry and procedures they can do are restricted by law and local policy.

If s/he wants to assist, this can only be done through one of the alternatives listed. These alternatives have been endorsed by CMA, State EMS Authority, CCLHO and BMQA.

Assistance rendered in the endorsed fashion, without compensation, is covered by the protection of the "Good Samaritan Code" (see Business and Professions Code, Sections 2144, 2395-2398 and Health and Safety Code, Section 1799.104).

ENDORSED ALTERNATIVES FOR PHYSICIAN INVOLVEMENT

After identifying yourself to the paramedic by name as a physician licensed in the State of California, and consulting with the Base Hospital physician and, if requested, showing proof of identity, you may choose to do one of the following:

1. Offer your assistance with another pair of eyes, hands, or suggestions, but let the life support team remain under base hospital control; or,

2. Take total responsibility for the care given by the life support team and physically accompany the patient until the patient arrives at a hospital and responsibility is assumed by the receiving physician. In addition, you must sign for all instructions given in accordance with local policy and procedure. (Whenever possible, remain in contact with the base station physician.)

The California Health and Safety Code, Division 2.5, Chapter 5, Section 1798.6 (a) states as follows:

Authority for patient health care management in an emergency shall be vested in that licensed or certified health care professional, which may include any paramedic or other prehospital emergency personnel, at the scene of the emergency who is most medically qualified specific to the provision of rendering emergency medical care. If no licensed or certified health care professional is available, the authority shall be vested in the most appropriate medically qualified representative of public safety agencies who may have responded to the scene of the emergency.

A key phrase in this is "...who is most medically qualified specific to the provision of rendering emergency care." The most medically qualified person certainly ought to be the base hospital physician, who is familiar with the county EMS system and paramedic procedures and protocols, and consequently, by extension, the base hospital nurse on the radio. The paramedic on scene is viewed as an extension of the base hospital physician, acting as his eyes and ears, and functions under his directions and orders.

Almost always, physicians on scene would be less qualified **specific to the provision of rendering emergency care,** and the paramedic/base hospital nurse/base hospital physician would be legally in charge of the scene.

It is certainly in everyone's best interest to have a smoothly operating team at the scene, and it is imperative that any physician on scene, expressing in whatever manner that he wants to be in command medically, be immediately put in radio contact with the base hospital physician.

ATTACHMENT I (continued)

The following is some suggested dialogue for the base hospital physician...

"Doctor, my name is ..... I am the base hospital physician at .....Hospital and we are in medical control of the paramedic unit at your scene.

"Generally, the medics can most efficiently get the patient under treatment and into the emergency care system under our radio direction, and if that is alright with you, I can give them that direction by radio. Would that be alright with you?

"If so, let me speak to the medics on the radio and I will get things under way with them. Perhaps, if you wish, you could stand by to lend an extra pair of eyes and hands but remember that the paramedics are closely limited by state law and county policies on what specific procedures they can do, and state law allows them to take orders only from the base hospital.

IF THE PHYSICIAN INSISTS ON TAKING MEDICAL CONTROL

"Doctor, I understand that you wish to take total responsibility for the care given by the life support team. To do so, requires that you are licensed in the state of California and can show your license to the medics on scene. You must also accompany the patient until he arrives at the hospital and responsibility is assumed by the receiving physician. In addition, you must sign for all instructions given in accordance with local policy and procedure. Is that your wish and intention?

"If so, I would ask that you state your name for the radio record and show the paramedics your California license. Could you also briefly tell me if you are on the staff of any local hospitals and what your training or specialty is, particularly with reference to the care of this patient.

"Please be advised again, that the state law does not allow the paramedics to take orders from anyone other than the base hospital physician, but they can assist you with basic life support.
...(It is the base hospital physician's option to make the equipment and drugs available to the on scene physician if he approves of his scene control.)

"Doctor, based on the information you have given me on the radio record, I am turning over medical control of the scene to you. You may request medications and drugs from the paramedics and they will assist you with basic life support. I will be standing by on the radio in case a problem arises and you need to discuss something further with me. If you would put the medics back on the radio, I will so advise them. Thank you.

....

If you cannot establish the competence of the on scene physician to your satisfaction, you should not turn over medical control. You may reference the previous information in a manner such as...

"California Health and Safety Code section 1798.6 specifically states that authority for patient health care management in an emergency shall be vested in that licensed ... professional...who is most medically qualified specific to the provision of rendering emergency medical care. In this case, while I want to thank you for your offer of assistance, I'm afraid I do not feel that I can reasonably turn over the scene management to you and I must request that you allow the paramedics to proceed with the emergency care of the patient. If you wish to discuss this with me or my base hospital medical director, Dr ....., you may phone us later at our hospital at phone number ..... Could you please put the medics back on the radio so I may give them the orders necessary for the patient's care. Again, we would appreciate any cooperation you could give the medics.

SUBJECT: COMMUNICATIONS FAILURE **Date: 07/01/02**

I. Authority: Health and Safety Code, Division 2.5, Section 1797.8 and 1798.2.

II. Purpose: To document the procedure for EMT-paramedic activity during and reporting of communications failure.

III. Policy:

A. In the event that an EMT-paramedic at the scene of an emergency attempts direct voice contact with a physician or mobile intensive care nurse (MICN) but cannot establish or maintain that contact and reasonably determines that a delay in treatment may jeopardize the patient, the EMT-paramedic may initiate any EMT-paramedic activity authorized by the EMS Medical Director in accordance with the County of San Diego Treatment Protocols, "Standing Orders for Communications Failure", until such direct communication may be established and maintained or until the patient is brought to a general acute care hospital. Direct voice communication with the base hospital shall be attempted at the scene or en route.

B. In each instance where advanced life support procedures are initiated in accordance with Section A of this Policy, immediately upon ability to make voice contact, the EMT-paramedic who has initiated such procedures shall make a verbal report to the contacted EMT-paramedic Base Hospital Physician or MICN. A "Report of ALS Services Provided Without Base Hospital Contact" form (Attachment A) shall be completed and filed with the contacted EMT-paramedic Base Hospital Physician, when possible, immediately upon delivery of the patient to a hospital, but in no case shall the filing of such documentation be delayed more than twenty-four (24) hours. If no contact is made, the form is filed with the assigned Base Hospital. The Base Hospital Physician shall evaluate this report and forward the report to the EMS Medical Director within seventy-two (72) hours of receipt of report from Paramedic(s).

Approved:

EMS Medical Director

COUNTY OF SAN DIEGO OFFICE OF EMERGENCY MEDICAL SERVICES

ATTACHMENT A

Report of ALS Services Provided without Base Hospital Contact: In accordance with Health & Safety Code, Division 2.5 Section 1798.4, any incident wherein advanced life support was rendered in the absence of direct communication with a Base Hospital must be verbally reported to the Base Hospital Physician or MICN immediately upon ability to make voice contact, and the following report must be completed; if more than one patient was treated, a separate form must be completed for each patient. Complete reports must be submitted to a Base Hospital Physician at the hospital to which you are regularly assigned within twenty-four (24) hours of the incident.

- -

Date of incident: ________ PM Agency: ________________ Unit:

Paramedics - (Patient Care): ________________ (Radio):

Base Hospital (if contact made): ___________________ Run Number:

Assigned Base Hospital: _____________ EMS Form Number: _______ (Copy must be attached)

Completely describe the nature of the communication problem including suspected cause, exact geographic location,

remedial actions taken, alternate modes attempted:

Detail the conditions and patient assessment that led you to believe the patient was in jeopardy of losing his/her life

without ALS Treatment:

What specific ALS treatment was given without medical control?

What was the patient's condition on arrival at the hospital?

List witnesses at scene (first responders, other medical personnel)

Receiving RN Name: ______________________________ MD Name: ________________________

Hospital receiving patient:

Incident Reported	Date:	Time:	Agency:	Person reported to:
Verbal report(s)				
Written report:				

We, the above paramedics affirm that the statements made on the report are complete and true to the best of our knowledge.

Signature: ______________ Cert #: ______ Date: ____________________

Signature: ______________ Cert #: ______ Date: ____________________

Written report received by:(signature)

Date & Time received: ___________________ Base Hospital: ______________________________

- -

Base Hospital Physician Review:

Signature: _________________________ , M.D. Date: ______________________________

- -

Please attach copies of the following when submitting this report to the Division of Emergency Medical Services.

A. All documentation provided by service provider agency and paramedics

B. Copy of the MICN report form and copy of paramedic tape (if contact was made).

C. Copy of EMS Prehospital Patient Record

Forward copies of all documentation with 72 hours to:
EMS Medical Director, County of San Diego
Division of Emergency Medical Services
6255 Mission Gorge Road
San Diego, CA 92120

COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES

For Office Use Only

Date and time report received:

Date: _____ Time:

Report received by:
( ) EMS Medical Director
( ) EMS Chief
( ) EMS Paramedic Coordinator

Reviewer's Comments:

Recommended Action:

A. Receive and file - no further action required ( )
B. Forward summary of communication problems to County Communications for review and recommendations ( )
C. Return to Base Hospital for further information ( ) Detail:

D. Return to Base Hospital for the following recommended action(s): ( )

E. Forward to service provider agency for review ( )

F. Other: ( )

Signature of Reviewer:

Date: _____ Title: _____

Medical Director Review:

Recommended action(s):

EMS Medical Director Date:

The Office of EMS will review and distribute its findings to the appropriate individuals listed below within thirty (30) days of receipt of this report.

Distribution File

( ) ( ) Special Incident

( ) ( ) EMT-Paramedic - Name:

( ) ( ) EMT-Paramedic - Name:

( ) ( ) Base Hospital - Name: _____

( ) ( ) Receiving Hospital - Name:

( ) ( ) Service Provider Agency - Name:

( ) ( ) Other: ____

SUBJECT: DETERMINATION OF DEATH **Date: 07/01/02**

I. **Authority**: Health and Safety Code, Division 2.5, Section 1798.

II. **Procedure:**

A. When the patient is determined to be "obviously dead," resuscitation shall not be initiated per Policy S-402.

1. The "obviously dead" are victims who, in addition to absence of respirations and cardiac activity, have suffered one or more of the following:

a. Decapitation

b. Evisceration of heart or brain

c. Incineration

d. Rigor Mortis

e. Decomposition

2. The prehospital personnel shall describe the incident and victim's condition on the Prehospital Patient Record, clearly stating the reasons that life support measures were not initiated.

B. It is not the responsibility of aeromedical prehospital personnel to pronounce the death of a patient in the prehospital care setting. However, there may be situations where the flight nurse is called upon to determine death on scene.

1. If despite resuscitation efforts, the patient remains pulseless and apneic, for the following type of chief complaint or mechanism of injury, the flight nurse may determine death on scene:

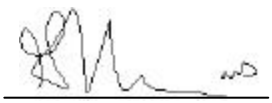
a. Medical CPR

b. Traumatic CPR

1) Blunt Injury

2) Penetrating Injury

Approved:



EMS Medical Director

2. Special Considerations:

   a. In cases of obvious death, a monitor need not be used to determine death.

   b. If a monitor is used, a patient with a rhythm of ventricular fibrillation requires a Base Hospital Physician Order for determination of death.

   c. If victims of hypothermia, electrocution, lightning strikes and drowning do not meet "obvious death" criteria, determination of death requires a Base Hospital Physician Order.

   d. In any situation where there may be doubt as to the clinical findings of the patient, basic life support (BLS/CPR) must be initiated.

C. When a "death has been determined," no basic or advanced life support shall be initiated or continued.

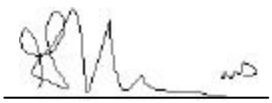
1. The flight nurse is authorized to discontinue CPR or advanced life support (ALS) care initiated at the scene.

2. The appropriate law enforcement agency must be notified.

3. In situations where no other emergency medical services (EMS) personnel or authorized personnel are available, the flight crew will remain on scene until released by law enforcement.

4. The flight crew will document on the prehospital patient record and the flight record the patient's name, if known, the criteria for determination of death, the time the death was determined and resuscitative efforts discontinued.

Approved:



EMS Medical Director

SUBJECT: TRIAGE TO APPROPRIATE FACILITY **Date: 07/01/04**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.88 and 1798.

II. Purpose: To provide guidelines for transportation of patients.

III. Policy:

A. Patients will be transported from the scene of the incident to the most accessible and appropriate facility staffed, equipped, and prepared to administer care appropriate to the needs of the patient.

B. Trauma center candidates who meet trauma triage criteria will be transported to the most appropriate trauma center.

C. Transport to other than the most accessible facility will be ordered if it is in the best interest of the patient, based on the medical judgment of the Base Hospital.

D. If facility of preference requested by a patient or patient's adult family member is beyond a reasonable distance from the incident scene or is not medically in the best interest of the patient, refer to Policy P-412.

E. Prehospital personnel accompanying patient(s) to a receiving facility will remain with the patient(s) until medical management is assumed by the receiving facility's medical staff, and will provide staff with a verbal report.

F. In the event that there is a delay in the turnover of the patient to the receiving facility medical staff, subsequent medical interventions, once at the facility, will be at the discretion of the receiving facility.

G. The Emergency Medical Services Prehospital Patient Record, including field cardiac rhythm strips, will be left with the patient. This is particularly important for those patients who are in acute status or are major trauma victims.

Approved:

Medical Director

SUBJECT: VARIATION FROM SAN DIEGO COUNTY PROTOCOLS FOR ADVANCED LIFE SUPPORT **Date: 07/01/04**

I. Authority: Health and Safety Code, Sections 1797.90, 1797.202, 1797.220, 1798 (et.seq.)

II. Purpose: To identify the process by which a Base Hospital Physician may issue medical orders that vary from standard San Diego County ALS protocols.

III. Policy:

A. Base Hospital Physicians may issue medical treatment orders which vary from San Diego County ALS treatment protocols under the following criteria:

1. The order must be within the California Scope of Practice for EMT-Paramedics (Title 22**,** Section 100145) and included in the San Diego County ALS protocols, or within the San Diego County expanded Scope of Practice for EMT-Paramedics (SD County policy P-401).
2. The order must be transmitted to field personnel by the Base Hospital Physician or authorized mobile intensive care nurse (MICN) via direct voice contact.
3. Variation from protocol must be deemed necessary by the Base Hospital Physician to prevent serious morbidity or mortality.

B. The EMT-Paramedic (EMT-P) nor and/or the MICN shall not be subject to disciplinary actions for carrying out or declining orders that vary from protocol that meet the above criteria.

C. All variations from protocol shall be reported to the EMS Medical Director and the Prehospital Audit Committee for evaluation and tracking.

Approved:

EMS Medical Director

IV. Procedure:

A. The Base Hospital Physician, after determining that a variation from protocol (a "Variation") is necessary to prevent serious morbidity or mortality, shall:

1. Transmit the order personally to the field personnel or instruct the MICN to transmit the order via direct voice communication, and
2. Sign the MICN run sheet or otherwise document the order, and
3. Complete "Notification of Variation from Advanced Life Support Treatment Protocol" (Attachment A) and submit it to the Base Hospital Medical Director, Base Hospital Nurse Coordinator or designee within twenty-four 24 hours of the occurrence of the incident.

B. The MICN shall:

1. Receive the verbal order with explanation of rationale from the Base Hospital Physician and acknowledge that the order is a Variation from ALS protocol, and
2. Transmit the order to field personnel (if the physician has not already done so), and state that "this Variation from ALS protocol was ordered by Dr. _____ ", and
3. Obtain the physician's signature or otherwise document the source of the order, and
4. Initiate a Notification of Variation from ALS Treatment Protocol form for the Base Hospital Physician to complete.

Approved:

_____

EMS Medical Director

C. The EMT-Paramedic shall:

1. Receive the order with explanation of rationale if needed directly from the Base Hospital Physician or MICN via direct voice communication, and
2. Acknowledge that the order received is a variation from San Diego County ALS protocol, and the Base Hospital Physician who gave the order and
3. Document on EMS Prehospital Patient Record the order for the Variation, and the name of the Base Hospital Physician (and the name of the MICN transmitting the order, if applicable) ordering the Variation.

D. The Base Hospital Medical Director or Base Hospital Nurse Coordinator shall gather all pertinent data relevant to the incident. This information will be documented on, or with, the Notification form.

E. The Base Hospital Medical Director shall review the Variation to determine if it was necessary to prevent serious morbidity or mortality, and was consistent with San Diego County Scope of Practice for EMT-Paramedics or the State of California EMT-P Scope of Practice. The Base Hospital Medical Director shall document this determination, and any necessary educational efforts with the field, medical physician or nursing personnel involved, on the Notification form, and cause a copy of this form (and attachments) to be submitted to the San Diego County Division of EMS Medical Director for review and analysis (including review for the Prehospital Audit Committee).

Approved:

EMS Medical Director

COUNTY OF SAN DIEGO
PREHOSPITAL QUALITY ASSURANCE REPORT - *Confidential*

NOTIFICATION OF VARIATION FROM SAN DIEGO COUNTY ADVANCED LIFE SUPPORT TREATMENT PROTOCOL

Reporting Base Hospital: Date & Time of Incident:

MICN: Run #: Unit Agency and #:

Field Personnel (EMT-P's or EMT-I's):

Base Hospital Physician:

Specific Physician Order:

Description of Incident:

Base Hospital Physician Comments:

Base Hospital Medical Director review, action and comments:
☐ This variation is deemed necessary to prevent serious morbidity or mortality
☐ This variation was within the California/SD County EMT-P Scope of Practice
Comment:

_____ _____ _____ _____
Base Hospital Medical Director date Base Hospital Nurse Coordinator date

***************** FOR COUNTY USE ONLY ***************

County EMS Medical Director Comment:

Action:

[ ] Received EMS date _____ [ ] PAC Report date _____

SUBJECT: REPORTING OF ISSUES IN PATIENT CARE MANAGEMENT **Date: 01/01/05**

I. Authority: Health and Safety Code, Division 2.5, Section 1797.220 and 1798.102.

II. Purpose: To establish the primary responsibilities of all participants in the San Diego County's Emergency Medical Services System for reporting to the Medical Director of the County of San Diego Emergency Medical Services (EMS), issues of patient care management.

III. Policy:

A. The County of San Diego, Health & Human Services Agency, Emergency Medical Services Branch (EMS) shall maintain agreements with Base Hospitals and EMS provider agencies requiring:

1. Reporting issues in medical management of patients to the EMS Medical Director, including, but not limited to:
    a. Actions outside of the scope of practice of prehospital personnel
    b. Actions or errors that actually or potentially result in untoward patient outcomes, such as errors in administration of medications, invasive procedures, defibrillation/cardioversion, or other patient treatments.
2. Reporting actions or behaviors that endanger the welfare of patients or adversely affect the public regard for prehospital emergency services.
3. Reporting EMS personnel or EMS provider agency trends indicating on-going frequency of errors or non-compliance with established policies, protocols or standards of patient care.

B. EMS shall establish a Quality Improvement program in compliance with Policy S-004.

C. Base Hospitals will implement their own Quality Improvement program in compliance with Policy S-004. Patient care issues will be reported to the County of San Diego EMS through the Prehospital Audit Committee process.

D. Each EMS provider agency will implement its own Quality Improvement program in compliance with Policy S-004. Patient care issues will be reported to the agency's designated Base Hospital or the County of San Diego, EMS Medical Director.

EMS prehospital personnel are expected to report significant issues in medical management of a patient to their agency, Base Hospital and/or County of San Diego EMS Medical Director.

Approved:

Administration **EMS Medical Director**

SUBJECT: SAN DIEGO COUNTY SPECIAL ASSIGNMENT-PARAMEDIC **DATE: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.172 and 1798.4, Title 22, Section 100141.

II. Purpose: To establish policy for special paramedic operations and patient care while assigned to extraordinary special assignments or missions.

III. Policy:

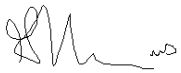
A. This policy applies only to those currently certified Paramedics formally appointed and assigned by an approved Paramedic service provider agency which has been designated by the County of San Diego, Emergency Medical Services Branch (EMS) to provide personnel for special assignments or missions exclusively at the request of security/law enforcement/other services approved by the EMS Medical Director.

B. This policy is operative only for the duration of a specific special assignment or mission of the agencies specified in "A" above.

C. Paramedics on special assignment will not be required to make Base Hospital contact to treat patients due to the operational requirements of the special assignment/mission that prohibit the practical employment or presence of telemetry communications equipment.

1. The Paramedics will experience communications failure by default due to the nature of a special assignment/mission.
2. Paramedics shall establish base hospital radio contact at the earliest opportunity afforded by the circumstances of the special assignment/mission should it become necessary to engage in ALS level treatment.

Approved:



EMS Medical Director

D. Paramedics engaged in a special assignment or mission may, as the mission dictates, treat patients in accordance with the following:

1. EMT-Paramedic Treatment Protocol P-110 ALS Adult Standing Orders and P-111 Adult Standing Orders for Communications Failure.
2. EMT-Paramedic Treatment Protocol P-405 Communications Failure.
3. A report must be filed as specified in Policy P-405 Attachment "A" should any patient receive ALS treatment in connection with a special assignment/mission when communication failure occurs.

E. Paramedics engaged in a special assignment/mission will be permitted to operate and engage in patient care without a second Paramedic partner or authorized Mobile Intensive Care Unit (MICU) as the logistics of the special assignment/mission dictate.

F. Paramedics are responsible to maintain sufficient equipment and medical supplies necessary to treat a victim that meets the requirements of this special assignment protocol.

G. The transport of victim(s) to receiving hospitals shall at all times be consistent with existing state and county policy except as security and other considerations require with respect to special assignments for the U.S. Secret Service and U.S. State Department exclusively.

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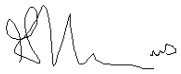

EMS Medical Director

SUBJECT: REPORTING OF SUSPECTED CHILD, DEPENDENT ADULT, OR ELDER ABUSE/NEGLECT **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Section 1798 and; Child Abuse: California Penal Code, Article 2.5; and, Elder Abuse: Chapter 1273, Statutes of 1983, SB 1210, Sections 9381(a) and 9382, Welfare and Institutions Code Chapter II, Part 3, Division 9.

II. Purpose: To establish a policy for identification and reporting of incidents of suspected child, dependent adult or elder abuse/neglect.

III. Policy: All prehospital care personnel are required to report incidents of suspected neglect of, or abusive behavior toward children, dependent adults or elders.

IV. Reporting Procedure:

A. Child Abuse/Neglect:

1. Suspicion of Child Abuse/Neglect is to be reported by prehospital personnel by telephone to the Child Abuse Hotline {(858) 560-2191] immediately or as soon as possible. Be prepared to give the following information:

   a. Name of person making report;

   b. Name of child;

   c. Present location of the child;

   d. Nature and extent of the abuse/neglect;

   e. Information that led reporting person to suspect child abuse/neglect;

   f. Location where incident occurred, if known; and

   g. Other information as requested.

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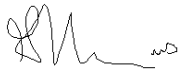


EMS Medical Director

2. Phone report must be followed within thirty-six (36) hours by a written report on “Suspected Child Abuse Report" form #SS8572 (see attached). The mailing address for this report is: Health and Human Services Agency (HHSA), Children’s Services Child Abuse Hotline, 6950 Levant Street, San Diego, CA 92111. Fax of this report is not authorized.

3. The identity of all persons who report under this article shall be confidential and disclosed only between child protective agencies, or to counsel representing a child protective agency, or to the district attorney in a criminal prosecution or by court order.

B. Dependent Adult and Elder Abuse/Neglect:

1. Suspicion of Dependent Adult and Elder Abuse/Neglect should be reported as soon as possible by telephone to the Adult Protective Services at HHSA Aging and Independent Services (858) 495-5247. Be prepared to give the following information:

   a. Name of person making report;

   b. Name, address, and age of the dependent adult or elder;

   c. Nature and extent of person's condition; and,

   d. Other information, including information that led the person to suspect abuse/neglect.

2. Telephone report must be followed by a written report within thirty-six (36) hours of the telephone report using "Report of Suspected Dependent Adult/Elder Abuse" form SOC 341 (see attached). The mailing address for

this report is: Adult Protective Services, 9335 Hazard Way #100, San Diego, CA 92123. The report may be faxed to (858) 694-2568.

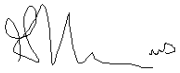
3. Copies of form SOC 341 can be accessed at the following website: http://www.dss.cahwnet.gov/pdf/soc341.pdf

4. The identify of all persons who report shall be confidential and disclosed only by court order or between elder protective agencies.

C. When two or more persons who are required to report are present at scene, and jointly have knowledge of a suspected instance of child, dependent adult, or elder abuse/neglect, and when there is agreement among them, the telephone report may be made by a member of the team selected by mutual agreement and a single report may be made and signed by such selected member of the reporting team. Any member who has knowledge that the member designated to report has failed to do so, shall thereafter make such report.

D. The reporting duties are individual, and no supervisor or administrator may impede or inhibit such reporting duties and no person making such report shall be subject to any sanction for making such report. However, internal procedures to facilitate reporting and apprise supervisors and administrators of reports may be established provided they are consistent with the provisions in this article.

Approved:



EMS Medical Director

SUBJECT: PREHOSPITAL TREATMENT AND TRANSPORTATION OF ADULTS - REFUSAL OF CARE OR SUGGESTED DESTINATION, RELEASE **Date: 07/01/03**

I. Authority: Health and Safety Code, Division 2.5, Section 1798.

II. Purpose: To establish a procedure for a patient or designated decision maker (DDM) to refuse care (assessment, treatment, or transport) or request an alternate disposition by EMS personnel.

III. Definitions:

A. AMA - The refusal of treatment or transport, by an emergency patient or his/her designated decision maker, against the advice of the medical personnel on scene or of the base hospital.

B. Designated decision maker (DDM) - An individual to whom a person has legally given the authority to make medical decisions concerning the person's health care (i.e., through a Durable Power of Attorney for Health Care).

C. Emergency Patient - Any person for whom the 9-1-1/EMS system has been activated and who meets the following criteria:

1. Has a chief complaint or suspected illness or injury; or
2. Is not oriented to person, place, time, or event; or
3. Requires or requests field treatment or transport; or
4. Is under the age of 18 and is not accompanied by a parent or legal guardian.

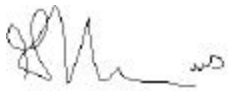
D. Release -A call outcome that occurs when the patient and the EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services and the patient does not require the services of the prehospital system.

IV. Policy:

A. All emergency patients will be offered treatment and/or transport following a complete assessment.

B. Against Medical Advice (AMAs)

Approved:



EMS Medical Director

1. Adults have the right to accept or refuse any and all prehospital care and transportation, provided that the decision to accept or refuse these treatments and transportation is made on an informed basis and provided that these adults have the mental capacity to make and understand the implications of such a decision.
2. The decisions of a Designated Decision Maker (DDM) shall be treated as though the patient was making these decisions for him/herself.
3. For those emergency patients who meet base hospital contact criteria (S-415) and wish to sign AMA, prehospital personnel shall use their best efforts to make base hospital contact prior to the patient leaving the scene and prior to the responding unit leaving the scene. In the event that the patient leaves the scene prior to base hospital contact, field personnel shall still contact the base hospital for quality improvement and trending purposes only.
4. The EMT-I or paramedic should contact the base hospital and involve the MICN and/or base hospital physician in any situation in which the treatment or transport refusal is deemed life threatening or "high risk" by the EMT-I or paramedic.
5. Field personnel shall document, if possible, the following for all patients released AMA:
    a. Who activated 9-1-1 and the reason for the call.
    b. All circumstances pertaining to consent issues during a patient encounter.
    c. The presence or absence of any impairment of the patient/DDM such as by alcohol or drugs.
    d. The ability of the patient/DDM to comprehend and demonstrate an understanding of his/her illness or injury.
    e. The patient/DDM has had the risks and potential outcome of non-treatment or non-transport explained fully by the EMT or Paramedic, such that the patient/DDM can verbalize

understanding of this information.

f. The reasons for the AMA, the alternate plan, if any, of the patient/DDM and the presence of any on-scene support system (family, neighbor, or friend [state which]).

g. That the patient/DDM has been informed that they may re-access 9-1-1 if necessary.

h. The signature of the patient/DDM on the AMA form, or, if the prehospital personnel are unable to have an AMA form signed, the reason why a signed form was not obtained.

i. Consideration should be given to having patient/family recite information listed in sections IV.B.5. d-g above, to the MICN/BHP over the radio or telephone.

C. Patient Refusal of Transport to Recommended Facility

Should the situation arise wherein a patient refuses transport to what is determined by the base hospital to be the most accessible emergency facility equipped, staffed and prepared to administer care appropriate to the needs of the patient, but the patient requests transport to an alternate facility:

1. Field personnel should discuss with the base hospital the patient's or DDM's rationale for their choice of that alternate facility.
2. Inform the patient or DDM of base hospital's rationale for its selected destination.
3. If the patient still refuses transport to the selected destination, follow procedures for the patient to refuse treatment and/or transport "against medical advice" (AMA). However, if, in the judgment of the base hospital, the patient's refusal of transport would create a life-threatening or high-risk situation, and the patient continues to refuse the recommended destination, document the AMA and transport the patient to the requested facility if possible.
4. Arrange for alternate means of transportation to the facility of choice if appropriate.

D. Downgrade

1. Following a complete paramedic assessment and base hospital report (as required per San Diego County EMS Policy S-415), the base hospital may authorize a downgrade in the transportation and treatment needs of an ALS-dispatched patient from advanced life support (i.e., paramedic treatment and transport) level of prehospital care to BLS (EMT-I treatment and transport) level of care and that unit can continue to transport the patient to any destination. All downgrades shall be reviewed by the agency's internal Quality Improvement program.
2. If the patient's condition deteriorates during the transport, the paramedic shall contact the base hospital authorizing the downgrade, initiate appropriate ALS treatment protocols, and deliver the patient to the most appropriate facility at the direction of the base hospital. The Base Hospital shall generate a report to the Prehospital Audit Committee documenting the incident.
3. If the paramedics have transferred care to a BLS service provider and the patient's condition deteriorates during the BLS transport, the EMT-I shall contact a base hospital, inform the base hospital that the patient had been downgraded from ALS to BLS, and deliver the patient to the most appropriate facility at the direction of the base hospital. The Base Hospital shall generate a report to the Prehospital Audit Committee documenting the incident.

E. Release

If the patient and EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services, and the patient does not require the services of the prehospital system, the patient may be released at scene. For those patients who meet base hospital contact criteria (S-415), field personnel shall attempt to contact the base prior to the patient leaving the scene.

Approved:

EMS Medical Director

SUBJECT: RESUSCITATION **Date: 7/1/06**

I. Authority: Health and Safety Code, Division 2.5, Section 1798.

II. Purpose: To establish guidelines for Emergency Medical Technicians (EMT's) (all levels) in San Diego County to determine appropriateness of either:

A. Discontinuing or withholding resuscitative measures, or;

B. Obtaining a Base Hospital Physician Order for pronouncement of patients in cardiac arrest while in the prehospital setting.

III. Definition:

A. Emergency Medical Technician shall apply to all EMT-I's, EMT/PS-D's, EMT-P's licensed, certified, and/or accredited to function in San Diego County.

B. Do not Resuscitate (DNR) means no chest compressions, no defibrillation, no assisted ventilation, no endotracheal intubation, and no cardiotonic drugs. The patient is to receive full treatment other than resuscitative measures (e.g., for airway obstruction, pain, dyspnea, major hemorrhage, etc.).

C. Absent vital signs: absence of respirations and absence of a carotid pulse.

D. DNR Medallion: metal or permanently imprinted insignia, belonging to the patient that is imprinted with the words "Do Not Resuscitate, EMS."

E. DNR Form: Any completed "Do Not Resuscitate Form."

F. Advance Health Care Directive: An individual health care instruction or a power of attorney for health care.

IV. Procedure:

Approved:

EMS Medical Director

A. All patients with absent vital signs who are not "obviously dead," (refer to Policy S-402) shall be treated with resuscitative measures, unless one of the following circumstances apply:

1. An EMT may withhold CPR if presented with one of the following:
    a. DNR Medallion.
    b. A completed DNR Form stating, "Do not resuscitate," "No code," or "No CPR."
    c. A written, signed order in the patient's medical record.
    d. An Advance Health Care Directive.
    e. Upon receipt of a Base Hospital Physician Order.

2. An EMT may discontinue CPR if presented with one of the following:
    a. A DNR Medallion.
    b. A completed DNR Form stating, "Do not resuscitate," "No code," or "No CPR."
    c. A written, signed order in the patient's medical record.
    d. An Advance Health Care Directive.
    e. Upon receipt of a Base Hospital Physician Order.

B. Documentation

Reason for withholding or terminating CPR shall be documented in the patient care record. DNR orders shall include the name of the physician or designee (e.g. Physician Assistant, Nurse Practitioner), and the date of the order. If patient

transport is initiated, the DNR Form (original or copy), DNR Medallion, or a copy of the valid DNR Order from the patient's medical record shall accompany the patient.

C. Considerations

1. In the event any patient expires in an ambulance either before or during transport, the following should be considered:

    a. Unless specifically requested, the patient should not be returned to a private residence or skilled nursing facility, continue to the destination hospital.

    b. If between hospitals, return to the originating hospital if time is not excessive. If transport time would be excessive, divert to the closest hospital with a basic emergency facility (BEF).

    c. In rural areas in cases where the Medical Examiner has not waived the case, the transporting agency and the Medical Examiner shall arrange for a mutually acceptable rendez-vous location where the patient may be taken and left in the custody of law enforcement, so that the transporting unit may return to service.

SUBJECT: BASE HOSPITAL CONTACT, PATIENT TRANSPORTATION AND REPORT - EMERGENCY PATIENTS **Date: 7/1/01**

I. Authority: Health & Safety Code, Division 2.5, Section 1797.88; 1798. Title XXII, Section 100170, Civil Section 25.8.

II. Purpose: To identify conditions under which EMT-Is and paramedics shall, when encountering an emergency patient, contact a base hospital for notification, medical direction, or to give report; or (for EMT-Is) contact a receiving hospital to verify appropriate transport destination and give report.

III. Definitions:

A. Aid Unnecessary - Calls in which the person for whom 9-1-1 was called does not meet the definition of "emergency patient," and has agreed to make alternate transportation arrangements if necessary.

B. Call Canceled - Calls to which EMS personnel were responding but the response was canceled prior to encountering an emergency patient or potential patient.

C. Complete Patient Report - A problem-oriented verbal communication which includes:

1. Acuity.
2. Age.
3. Gender.
4. Chief complaint(s).
5. Vital signs (including 0_2 saturation when possible).
6. Pertinent history, allergies, medications.
7. Pertinent findings of the primary and secondary survey.
8. Field treatment and response.
9. Anticipated destination facility.
10. Estimated time of arrival.

D. Initial Notification- A brief communication by the field personnel to provide the acuity, age, gender, and chief complaint of the patient to the base hospital to assist in determining appropriate patient destination. This communication is intended to verify resource capability and availability of the facility that will receive the

patient.

E. Release - A call outcome that occurs when the patient and the EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services and the patient does not require the services of the prehospital system.

F. Emergency Patient - Any person for whom the 9-1-1/EMS system has been activated and who meets the following criteria:

1. Has a chief complaint or suspected illness or injury; or
2. Is not oriented to person, place, time, or event; or
3. Requires or requests field treatment or transport; or
4. Is a minor who is not accompanied by a parent or legal guardian and is ill or injured or appears to be ill or injured

G. Elopement - The departure from the scene of a patient, in which the patient has refused to comply with established procedures for refusing care or transportation.

H. Minor - A person under the age of 18 and who is not emancipated

I. Designated decision maker (DDM) - An individual to whom a person has legally given the authority to make medical decisions concerning the person's health care (i.e., a parent, legal guardian, an "attorney in fact" through a Durable Power of Attorney for Health Care, or an "agent" through an Advance Health Care Directive).

IV. Policy:

A. EMT-Is - Hospital contact is required for all patients who are transported to the Emergency Department of a hospital.

1. EMT-Is shall contact the intended facility as soon as possible to verify their destination and to provide a complete patient report.
2. EMT-Is shall call:

a. A base hospital if they have a question regarding the appropriate treatment or disposition of any patient.

b. A designated trauma center for those patients who meet trauma center criteria (T-460).

c. UCSD base for those patients meeting Burn Center criteria (S-124).

B. EMT-Ps - Base hospital contact is required by paramedics in the following situations (except in cases of elopement - see **III. D**.):

1. Any emergency patient transport by paramedics, including transports by paramedic ambulance to a BLS destination following downgrade to BLS.
2. Any emergency patient treatment involving ALS medications or skills (except EKG monitoring)
3. Any emergency patient assessment involving abnormal vital signs, or an altered level of consciousness.
4. Any suspicion that the emergency patient (or designated decision maker [DDM]) is impaired by alcohol or drugs.
5. The emergency patient/DDM is unable to comprehend or demonstrate an understanding of his/her illness or injury.
6. The emergency patient meets criteria as a trauma center candidate (T-460).
7. The emergency patient is > 65 years of age and has experienced an altered/decreased level of consciousness, significant mechanism of injury, or **any** fall.
8. An emergency patient who is a minor is ill or injured or is suspected to be ill or injured.
9. Whenever paramedics have a question regarding appropriate treatment or disposition of the patient.

C. Any other communications between the patient, DDM, family member or care giver and prehospital personnel regarding refusal of care or care that is in variance with San Diego County prehospital treatment protocols or the San Diego County Resuscitation policy (S-414) (such as an Advance Health Care Directive, Living Will, Comfort Care communication, verbal notification from family member or care giver, DPAHC without attorney-in-

fact present, etc.), shall be immediately referred to the base hospital for evaluation. The base hospital shall evaluate this information and determine the plan of treatment and transport for the patient.

D. Treatment and transport decisions for emergency patients in involuntary or protective custody (i.e., under arrest by law enforcement, placed on a "5150" hold, or serving a prison term) are to be made by the authority under which they are being held.

E. Paramedics shall contact a base hospital as soon as possible to verify destination. Paramedics will first attempt to call their regularly assigned base hospital unless the emergency patient meets one of the following criteria:

1. Adult Trauma: For all adult emergency patients who appear to meet trauma center candidate criteria in T-460, paramedics shall first attempt to call the trauma base in the catchment area of the incident.
2. Pediatric Trauma: Paramedics shall first attempt to contact the designated pediatric trauma base for pediatric trauma center candidates (T-460).
3. Burns: Paramedics shall first attempt to contact the UCSD base for all emergency patients that meet burn center disposition criteria (S-124).

F. A complete patient report is required as soon as reasonably possible for all emergency patients transported. However, an initial notification may be made to a base hospital prior to the complete patient report without interfering with the paramedic's ability to implement standing orders. Standing orders for medications may not be implemented following the initiation of a complete patient report.

G. MICNs shall relay patient information received from the patient report to the appropriate receiving facility personnel.

H. Treatment and/or Transport of a Minor:

1. Treatment or transport of a conscious minor who is ill or injured or suspected to be ill or injured shall be with the verbal consent of the natural parent, legal guardian, or any adult authorized in writing by the legal guardian pursuant to Section 25.8 of the Civil Code (Attachment A).

2. Treatment or transport of a conscious minor who is ill or injured or suspected to be ill or injured, where the natural parents, legal guardian, or authorized persons are not present, will be under the direction of the Base Hospital.

   a. Transport shall be to the most accessible appropriate receiving or specialty care center.

3. Treatment or transport of a minor who is unconscious or suffering from a life threatening disease, illness, or injury in the absence of a natural parent, legal guardian or authorized person (Attachment A) may be initiated without parental consent.

I. Base Hospital contact is NOT REQUIRED on individuals who meet the following criteria:

1. Obvious death (S-402).
2. Discontinuation of CPR with a Prehospital DNR order or DPAHC on scene (S-414).
4. Release of a minor on scene who is neither ill nor injured, nor suspected to be ill or injured, may be permissible without Base Hospital contact if:

   a. Parent or legal guardian so requests

      OR

   b. A responsible adult other than parent or legal guardian (i.e. school nurse, law enforcement, or person of similar standing) so requests.

   c. The field EMT/EMT-P shall document the circumstances and identification of the person accepting responsibility for the minor.

5. Patients who wish to be released and do not meet base hospital contact criteria.
6. Dispatched as a BLS call where ALS treatment or intervention is not anticipated nor required.

SUBJECT: SUPPLY AND RESUPPLY OF DESIGNATED EMS AGENCIES AND VEHICLES **Date: 7/1/01**

I. **Authority**: California Health and Safety Code, Division 2.5, Chapter 4, Section 1797.202 and California Business and Professions Code, Division 2, Chapter 9, California Pharmacy Law. Section 4000, et seq.

II. **Purpose:** To provide a policy for agencies to procure, store and distribute medical supplies and pharmaceuticals identified in the Inventory.

III. **Definition**: Dangerous Drugs and Devices: Any drug or device unsafe for self-use (e.g. IV solutions and medications carried on the MICU Inventory). Drugs and devices bearing the legend, "Caution, federal law prohibits dispensing without prescriptions" or words of similar import.

IV. **Policy**:

A. Each agency shall have a mechanism to procure, store and distribute its own medical supplies and pharmaceuticals under the license and supervision of an appropriate physician. An appropriate physician is considered to be one of the following:

1. The Medical Director of the agency.
2. The County of San Diego, Division of Emergency Medical Services (EMS) Medical Director.
3. The Medical Director of a contracted base hospital.

B. Mechanisms of procurement may include the following:

1. Procurement of pharmaceuticals and medical supplies through a legally authorized source such as a pharmaceutical distributor or wholesaler.
2. Procurement of pharmaceuticals and medical supplies from a hospital that determines it has the legal authority to resell pharmaceuticals and supplies to an agency.

C. Each agency shall have procedures in place for the procurement, transport, storage and distribution of Dangerous Drugs and Devices.

Approved:

EMS Medical Director

D. If agency requests the County of San Diego, EMS Medical Director to assume responsibility for providing medical authorization for procuring Dangerous Drugs and Devices, these policies shall be reviewed and approved by the County of San Diego, EMS Medical Director and shall include the following:

1. Identification (by title) of individuals responsible for procurement and distribution.
2. A determination of reasonable quantities of supplies and pharmaceuticals that must be maintained to resupply agencies.
3. Maintenance of copies of all drug orders, invoices, and logs associated with Dangerous Drugs and Devices for a minimum of three years.
4. Procedures for completing a monthly inventory of Dangerous Drugs and Devices, which includes:
    a. Ensuring medications are stored in original packaging.
    b. Checking medications for expiration dates, rotating supplies for use prior to expiration, and exchanging for current medications.
    c. Properly disposing of expired medications that cannot be exchanged.
    d. Distributing to agencies.
    e. Returning medications to pharmaceutical distributor if notified of a recall.
5. Storage of drugs (other than those carried on a vehicle) that complies with the following:
    a. Drugs must be stored in a locked cabinet or storage area.
    b. Drugs may not be stored on the floor. (Storage of drugs on pallets is acceptable.)
    c. Antiseptics and disinfectants must be stored separately from internal and injectable medications.
    d. Flammable substances (e.g., alcohol) must be stored in a metal cabinet, in accordance with local fire codes.

e. Storage area is maintained within a temperature range that will maintain the integrity, stability and effectiveness of drugs.

6. Agencies shall develop, implement and maintain a quality assurance and improvement program that includes a written plan describing the program objectives, organization, scope, and mechanisms for overseeing the procurement, transport, storage, distribution and administration of Dangerous Drugs and Devices.

E. Agencies under the license and supervision of the County of San Diego, EMS Medical Director shall have a written agreement with the County of San Diego, Division of Emergency Medical Services that is specific to the procurement, transport, storage, distribution and administration of Dangerous Drugs and Devices.

Approved:

EMS Medical Director

SUBJECT: EMERGENCY MEDICAL TECHNICIAN/PUBLIC SAFETY-DEFIBRILLATION EQUIPMENT **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.52, 1797.170 and 1797.204.

II. Purpose: To identify specific type of Public Safety-Defibrillation equipment to be used in San Diego County.

III. Policy:

A. An approved PS-D Program shall use only automated external defibrillation (AED) equipment capable of generating an event record.

B. In areas where PS-D responders have the potential to interface with Advanced Life Support (ALS) units, procedures shall be established which allow for this interface.

C. Equipment shall be programmed to comply with current San Diego County treatment protocols.

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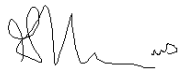

EMS Medical Director

SUBJECT: TRANSFER OF SPECIFIC PATIENT CARE INFORMATION BETWEEN FIRST RESPONDERS UTILIZING DEFIBRILLATION EQUIPMENT AND TRANSPORT PERSONNEL **DATE: 07/01/03**

I. Authority: Health and Safety Code, Division 2.5, Section 1798 and 1798.6.

II. Purpose: To assure effective transfer of patient care information between first responders utilizing defibrillation equipment, and transport personnel at the scene of an emergency.

III. Policy: Patient care information shall be communicated between first responders and transport personnel at the time of transfer.

IV. Procedure:

A. Transfer shall be to an equal or higher level of care only.

B. Prior to actual transfer of patient care responsibilities, the first responder will provide a verbal report to the transport personnel containing the following information:

1. Patient age.
2. Witnessed/unwitnessed arrest.
3. Approximate time from collapse.
4. Initiation of CPR prior to first responder arrival.
5. Initial monitored rhythm. (shockable vs non-shockable rhythm)
6. Number of defibrillatory shocks delivered and joules of each shock.
7. Response to treatment.

B. Once verbal report has been completed, the first responder shall assist the transport personnel in the transfer process as needed.

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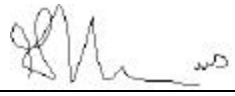


Medical Director

SUBJECT: APPLICATION OF PATIENT RESTRAINTS **Date: 07/01/02**

I. Authority: Health & Safety Code, Division 2.5, Section 1798; California Code of Regulations, Title 22, Section 100075, 100159

II. Purpose: To establish criteria for the use of restraints in the field or during transport.

III. Policy:

A. When field personnel apply restraints, the safety of the patient, community, and responding personnel shall be of paramount concern.

B. Whenever patient restraints have been applied in the field, prehospital personnel shall document in the Prehospital Patient Record the following:

1. The reason the restraints were needed (including previous attempts to control patient prior to restraint use), and;
2. the type of restraint used, the extremity(ies) restrained, the time the restraints were applied, and
3. which agency applied the restraints, and;
4. information and data regarding the monitoring of circulation to the restrained extremities, and;
5. information regarding the monitoring of the patient's respiratory status while restrained.

C. Restraints are to be used only for patients who are violent or potentially violent, or who may harm self or others.

D. Prehospital personnel must consider that aggressive or violent behavior may be a symptom of a medical condition.

E. The method of restraint used shall allow for adequate monitoring of vital signs and shall not restrict the ability to protect the patient's airway or compromise the neurological or circulatory status of the restrained extremity(ies).

F. If the patient has been restrained by a law enforcement officer (such as handcuffs, plastic ties, or "hobble" restraints, the following criteria must be met:

Approved:

EMS Medical Director

1. Restraints must provide sufficient slack in the restraint device to allow the patient to straighten the abdomen and chest and to take full tidal volume breaths.
2. Restraints applied by law enforcement require the officer's continued presence to ensure patient and scene management safety. The officer shall accompany the patient in the ambulance. In the unusual event that this is not possible, the officer should follow by driving in tandem with the ambulance on a pre-determined route. Prior to leaving the scene, prehospital personnel shall attempt to discuss an appropriate method to alert the officer of any problems that may develop during the transport requiring the officer's immediate presence.
3. Law enforcement personnel shall attempt, when possible, to modify their restraints to a medically accepted standard prior to transport.

   This policy is not intended to negate the use by law enforcement personnel of appropriate restraint equipment that is approved by their respective agencies to establish scene management control.

G. Restraints or protective devices that have been applied by medical personnel prior to transport may be continued during the transport per instructions from those medical personnel.

IV. Procedure:

A. Restraint equipment applied by prehospital personnel must be either padded leather restraints or soft restraints (i.e posey, velcro or seatbelt type). The method of restraint must provide for quick release.

B. The following forms of restraint shall not be used by EMS prehospital care personnel:

1. Any restraint device requiring a key to remove.
2. Backboard, stretcher or flat used as a "sandwich" restraint.
3. Devices that restrain a patient's hand(s) and/or feet behind the patient
4. Methods or materials applied in a manner that could cause vascular or neurological damage to the patient.

Approved:

EMS Medical Director

5. Hard plastic ties ("flex-cuffs"). Aeromedical personnel (only) may use hard plastic restraints provided that appropriate provider agency policies regarding the application and monitoring of the extremities restrained, and the use of alternate restraint methods (such as pharmaceutical restraints) are in place.

C. Patients shall not be restrained in a prone position. Prehospital personnel must ensure that the patient's position does not compromise the patient's respiratory/circulatory systems, or does not preclude any necessary medical intervention to protect the patient's airway should vomiting occur.

D. Restrained extremities shall be evaluated for pulse, movement, sensation and color at least every 15 minutes. The results of each evaluation shall be documented in the Prehospital Patient Record.

Approved:

EMS Medical Director

SUBJECT: UTILIZATION OF ATROPINE & 2-PAM CL FOR TREATMENT OF NERVE AGENT EXPOSURE **Date: 07/01/05**

I. Authority: Health & Safety Code, Division 2.5, Section 1797.105;
California Code of Regulations, Title 22, Division 9, Section 100145.2; and,
San Diego County Multicasualty Plan, Annex B & Annex D

II. Purpose: To identify the procedure for administration of Atropine and 2-PAMCl (Pralidoxime) for treatment of nerve agent exposure in a suspected terrorist event.

III. Definitions: Metropolitan Medical Response System (MMRS) - systematic medical response to nuclear, biological or chemical acts of terrorism.

Metropolitan Medical Strike Team (MMST) - a designated team specially trained and equipped to manage incident scenes of nuclear, biological or chemical acts of terrorism.

Nerve Agent - a chemical that has biological effects by inhibiting the enzyme acetyl cholinesterase, thus allowing the neurotransmitter acetylcholine to accumulate and over-stimulate organs and the nervous system causing sudden loss of consciousness, seizures, apnea and death. Nerve agents include Tabun (GA), Sarin (GB), Soman (GD) and VX.

Terrorism - the unlawful use of force or violence against persons or property or to coerce a government or civilian population in the furtherance of political or social objectives.

Approved:

EMS Medical Director

Weapons of Mass Destruction (WMD) - devices specially designed and utilized by terrorists to cause mass illness, injury, death and hysteria on a population.

IV. Policy:`

A. In a suspected or confirmed terrorist event in response to a release of Nerve Agent when signs and symptoms are exhibited, an Autoinjector or injection device of Atropine and 2PamCl may be administered.

B. The primary use of predeployed medication will be for treatment or self-treatment of public safety personnel.

C. Atropine and 2-PamCl will be stored and available for use on designated First Responder vehicles, Hazmat Units and deployable cache stockpiles per the MMRS plan.

D. Only prehospital personnel who have completed County of San Diego approved training specific to use of the Atropine and 2-PamCl are authorized to utilize the Autoinjectors.

E. If medications are used, and this is in response to a wide-spread incident consider activation of MMST through the EMS Duty Officer and Station M.

F. All uses of the medication and activation of the MMRS plan will be reviewed by the MMST Program Management Team with summary reports to the Medical Director and County EMS Prehospital Audit Committee.

Approved:

EMS Medical Director

SUBJECT: EMERGENCY MEDICAL TECHNICIAN-BASIC SCOPE OF PRACTICE **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170 and 1798, 1797.202 and 1797.214.

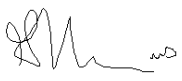
II. Purpose: To identify the scope of practice of EMT-Basic in San Diego County.

III. Policy:

A. During training, while at the scene of an emergency, and during transport of the sick or injured, or during interfacility transfer, a supervised EMT-Basic student or certified EMT-Basic is authorized to do any of the following:

1. Evaluate the ill and injured.
2. Render basic life support, rescue and first aid to patients.
3. Obtain diagnostic signs, including but not limited to, temperature, blood pressure, pulse, respiratory rate, level of consciousness, pupil status, and oxygen saturation.
4. Perform cardiopulmonary resuscitation, including the use of mechanical adjuncts to basic cardiopulmonary resuscitation (e.g. use of the automated external defibrillator {AED}).
5. Use the following adjunctive airway breathing aids:
   a. Oropharyngeal airway.
   b. Nasopharyngeal airway.
   c. Suction devices.
   d. Basic oxygen delivery devices, manual and mechanical ventilating devices designed for prehospital use.
   e. Esophageal Tracheal Airway Device (ETAD) if authorized by the local EMS Agency.
6. Use various types of stretchers and body immobilization devices.

Approved:



EMS Medical Director

7. Provide initial prehospital emergency care for patients with trauma.
8. Administer or assist patient to administer oral glucose or sugar solutions.
9. Assist patient to take his or her own prescribed Nitroglycerine.
10. Extricate entrapped persons.
11. Perform basic field triage.
12. Transport patients.
13. Assist paramedics to set up for advanced life support procedures excluding any medications except Normal Saline.
14. Manage patients within their scope of practice.

B. A supervised EMT-Basic student or certified EMT-Basic may monitor and transport patients with peripheral lines delivering IV fluids under the following circumstances:

1. The patient's condition is not critical and is deemed stable by the transferring physician or base hospital physician.
2. The fluid infusing is a glucose solution or isotonic balanced salt solution, including Ringer's Lactate.
3. The IV is infusing at a pre-set rate of flow.
4. The patient has received no medications by the parenteral route, i.e., IM, IV, SQ, etc., or by the oral/ transdermal route other than routine oral/transdermal medications, for at least thirty (30) minutes prior to transport.
5. No other advanced life support equipment is attached to the patient that will require monitoring that is outside the scope of practice of the EMT-Basic.
6. The patient has not received additional treatment by paramedics that are outside the

scope of practice of the EMT-Basic if in the prehospital setting.

C. A supervised EMT-Basic Student or certified EMT-Basic may monitor, maintain, to maintain pre-set rate, or turn off an IV infusion.

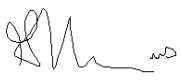
D. A supervised EMT-Basic student or certified EMT-Basic may monitor and transport patients, as described in B.1. above, with nasogastric (N.G.) tubes, gastrostomy tubes, heparin locks, Foley catheters, tracheostomy tubes, and/or indwelling vascular access lines, excluding arterial lines and uncapped central lines or other items approved by local EMS Agency.

E. A supervised EMT-Basic student or a certified EMT-Basic may assist patients with the administration of physician prescribed devices, including but not limited to, patient operated medication pumps, sublingual nitroglycerin, and self-administered emergency medications, including epinephrine devices.

F. An EMT-Basic may perform defibrillation on an unconscious, pulseless patient who is apneic or has agonal respirations, when authorized by an EMT AED service provider, according to established policies.

G. An EMT-Basic student or certified EMT-Basic may utilize additional skills and/or medications included as part of pilot study as determined by the EMS Medical Director in accordance with Section 1797.214 of the Health and Safety Code, Division 2.5.

Approved:



EMS Medical Director

SUBJECT: IDENTIFICATION AND TRANSPORTATION OF THE TRAUMA CENTER CANDIDATE **Date: 7/1/01**

I. **Authority:** Division 2.5, Health and Safety Code, Sections 1798, 1798.102 and 1798.163.

II. **Purpose:** To establish criteria for identification of trauma center candidates to be transported to a designated trauma center.

III. **Definitions:**

A. Adult – Any trauma candidate known or appearing to be 15 years of age or older.

B. Pediatric – Any trauma candidate known or appearing to be 14 years of age or less.

IV. **Policy:**

A. The base hospital physician/MICN shall use the following criteria to identify a trauma center candidate and the most appropriate destination for transport (see Trauma Decision Tree Algorithm attachment T-460(a)-01):

1. Physiologic Criteria: Glasgow Coma Score (GCS) < 14, Abnormal Vital Signs, Appearance, Work of Breathing and/or Circulation.
2. Anatomic Criteria: Patients with significant anatomic injury.
3. Mechanism of Injury: Patients sustaining a significant mechanism of injury, which may be indicative of severe underlying injury.

B. Transportation:

1. The adult patient who is identified as a trauma candidate will be transported to the most appropriate designated adult trauma center.
2. The pediatric patient who is identified as a trauma candidate will be transported to the most appropriate designated pediatric trauma center.

Approved:

EMS Medical Director

3. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should deliver the more critical patient to the appropriate facility. If both patients are critical, or if there are questions, both may be delivered to the designated adult trauma center. Field personnel should consider splitting the team using additional ALS transport vehicles, or air medical resources to transport the pediatric patient to a pediatric designated trauma facility and the adult to the catchment area trauma facility.
4. If the designated pediatric trauma center is "on bypass", pediatric trauma candidates should be delivered to the Level 1 adult designated trauma facility (UCSD).

C. The Trauma Decision Tree Algorithm (attached) is an educational guideline to assist in identification of the trauma candidate and does not exclude a patient from identification and transportation to a designated trauma center if in the judgement of the base hospital, it is in the patient's best interest.

D. All Prehospital Personnel will be trained in trauma triage as part of standard agency/facility orientation curriculum and upon any changes in trauma triage criteria.

Approved:

EMS Medical Director

TRAUMA DECISION TREE ALGORITHM

Assess vital signs and LOC

GCS <14 or Systolic BP <90 (Adult), <60 (Peds) or Respiratory Rate <10 or >29

Peds: Abnormal Appearance &/or Abnormal Work of Breathing &/or Abnormal Circulation

YES → **Call Trauma Base, Transport to appropriate trauma center**

NO → Assess anatomy of injury

- Flail Chest
- Combination trauma with burns
- Two or more proximal long-bone fractures
- Child Abuse-Known or suspected with significant injury
- All penetrating injuries to head, neck, torso, or extremities proximal to elbow/knee
- Amputation proximal to mid-hand &/or mid-foot
- Suspected pelvic fractures
- Limb paralysis
- Crush injury including hand, foot, or greater area
- Neuro/vascular deficit of extremities

YES → **Call Trauma Base, Transport to appropriate trauma center**

NO → Evaluate for evidence of mechanism of injury &/or high energy impact.

- Ejection from/off vehicle
- Auto impact speed >40 mph
- Auto vs. bike or pedestrian with >5mph impact
- Intrusion into occupied passenger space >12 inches to frontal area or >8 inches to side area adjacent to impact
- Fall >3 times patient's height or >15 feet
- Vehicle rollover with unrestrained patient
- Motorcycle crash > 20 mph
- Exposure to blast or explosion
- Pedestrian thrown or run over

YES → **Call Trauma Base, Transport to appropriate trauma center**

NO → Evaluate for co-morbid & other mechanism factors

- Age <5 or >55 years
- Cardiac &/or respiratory disease
- Insulin-dependent diabetes, cirrhosis, or morbid obesity
- Patients with bleeding disorders or on anticoagulants
- Shoulder restraint w/o lap belt
- Head injury with LOC reported
- Major auto deformity >20 inches
- Pregnancy
- Immuno-suppressed patients
- Vehicle rollover
- Extrication time >20 minutes
- Death in same passenger compartment

YES → **Contact Trauma Base Station; Consider transport to appropriate trauma center in presence of significant signs and symptoms**

NO → **Re-evaluation with medical direction and transport to the appropriate facility**

WHEN IN DOUBT, TAKE PATIENT TO APPROPRIATE TRAUMA CENTER

SUBJECT: AIR MEDICAL SUPPORT UTILIZATION **Date: 07/01/02**

I. ~~Authority~~: Health and Safety Code, Section 1797.204, 1797.206, 1797.218.

II. ~~Purpose~~: To establish guidelines for the use of aeromedical resources within the San Diego County EMS system.

III. ~~Policy~~: The San Diego County EMS system shall include the utilization of authorized aeromedical resources. Refer to Air Medical Services Plan.

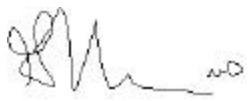
A. Any public safety agency on scene or a Base Hospital may call for aeromedical support. Considerations for utilization of aeromedical transport include:

1. delay in ground transport could pose an immediate threat to the patient's health and safety,
2. ground vs. air transport time and patient condition,
3. extrication time,
4. skill level of transporting ground unit,
5. specific operational problems, precluding effective use of surface transport such as:
    a. weather
    b. traffic
    c. access/egress routes
    d. local resource capabilities during time unit will be out of service
    e. multi-casualty incidents.
6. Utilization of Air Ambulance or ALS rescue aircraft.
    a. Patient's condition warrants rapid transport to medical facility.
    b. Patient's condition requires an advanced level of care.
    c. Multiple patient incidents when ground transport resources are insufficient.
7. Utilization of Auxiliary rescue aircraft.
    a. Utilize for rescue/rendezvous purposes only and shall not be for transportation to a medical facility.
    b. Patient care shall be transferred after rescue efforts to the most appropriate level of care provider available on scene based on the patient's condition.

EMS Medical Director

c. ALS or BLS ground transport providers shall not transport the patient via Auxiliary rescue aircraft to a medical facility.

B. EMS aeromedical resources may be canceled only by the requesting party.



EMS Medical Director

SUBJECT: DOCUMENTATION AND TRANSFERRAL OF PREHOSPITAL PATIENT CARE INFORMATION **Date: 7/1/01**

I. **Authority:** Health & Safety Code, Division 2.5 Section 1797.202, 1797.204, 1798.

II. **Purpose:** To identify minimum patient documentation standards for transferral of prehospital patient information, to meet legal patient documentation requirements, enhance the continuum of care, and provide for EMS system oversight and management.

III. **Definitions:**

A. Prehospital Patient Record (PPR): That document, approved and required by the County and completed either electronically or on paper, that officially records prehospital patient information.

B. Patient Response: A response to an individual who meets any of the following criteria:

1. Is an emergency patient (refer to S-412 for definition) or a patient for whom base hospital contact was made.
2. Meets obviously dead criteria or who has a DNR or equivalent documentation.
3. Transported by a BLS or CCT unit.

IV. **Policy:**

A. A PPR shall be completed for every patient response:

1. Each agency making patient contact shall complete a PPR which includes personnel from that agency who participated in that patient's care (assessment, treatment, advice, transport). If an agency responds more than one vehicle, the agency may combine information onto a single PPR listing patient care personnel, or submit individual PPRs for each vehicle responding.
2. In addition to the above, agencies may submit PPR's for all non-patient responses for statistical analysis by the Division of EMS.
3. In all incidents involving more than one patient one form will be completed for each patient except when the County's mass casualty plan (Annex D) is activated (See Policy S-140).

Approved:

Administration **EMS Medical Director**

B. The PPR shall be completed in accordance with instructions provided in the County's Prehospital Patient Record Instruction Manual.

C. When patient care is transferred, field personnel shall give a verbal patient care report to the receiving caregiver. This verbal report will relay pertinent history, vital signs, intervention, and response to treatment such that care may be transferred.

V. **Data Collection and Evaluation:**

Data collected by the Division of Emergency Medical Services from the Prehospital Patient Records and base hospital reports shall be stored by the County Division of EMS and used for overall system evaluation.

Approved:

Administration **EMS Medical Director**

SAN DIEGO COUNTY DIVISION OF EMERGENCY MEDICAL SERVICES **No. D-620**
POLICY/PROCEDURE/PROTOCOL **Page: 1 of 2**

SUBJECT: Emergency Medical Technician/Public Safety-Defibrillation Data Collection and Evaluation **Date: 2/15/99**

I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170 and 1797.204.

II. **Purpose:** To establish a data base to effectively evaluate San Diego County's EMT/PS-D System.

III. **Policy:**

A. Data essential to the evaluation of the EMT/PS-D System in San Diego County shall be collected by the Division of Emergency Medical Services in conjunction with Base Hospitals and provider agencies.

B. Minimum data to be collected for each EMT/PS-D patient shall include:

1. Age.
2. Sex.
3. Place of occurrence.
4. Witnessed/unwitnessed cardiac arrest.
5. The initial monitored rhythm.
6. Total number of defibrillatory shocks.
7. Time in minutes from call received to first analysis.
8. Outcome.
9. Any bystander CPR and by whom.

C. The above patient data will be sent to Division of Emergency Medical Services quarterly by the fifth day of the following months: January, April, July, October.

Approved:

Gail F Cooper
Administration

M.L. McCann MD
Medical Director

D. Data collected by the Division of Emergency Medical Services from the EMS Prehospital Patient Record shall be stored by the Division of Emergency Medical Services, and used for overall system evaluation, while maintaining patient confidentiality.

1. The Division of Emergency Medical Services shall distribute routine reports, summarizing data received, to provider agencies and Base Hospitals. Format of these reports will be developed by the Division of Emergency Medical Services in conjunction with the provider agencies and the Base Hospitals.
2. Requests for data for specific research projects must be submitted to the Division of Emergency Medical Services by the first of the month in which the data is required.

Approved:

Gail F Cooper

Administration

M.D. [illegible]

Medical Director

SAN DIEGO COUNTY DIVISION OF EMERGENCY MEDICAL SERVICES **No. D-621**
POLICY/PROCEDURE/PROTOCOL **Page: 1 of 1**

SUBJECT: Transfer of Patient Data/Medical Record **Date: 2/15/99**

I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204, 1797.220 and 1798.

II. **Purpose:** To establish guidelines in transferring and acquiring EMT/PS-D patient care data.

III. **Policy:** Transfer of patient data shall occur in accordance with policies and procedures mutually established between provider agencies, Base Hospitals and the Division of Emergency Medical Services.

IV. **Procedure:**

A. Each provider agency shall develop a procedure for relinquishing the EMT/PS-D event record to the assigned Base Hospital to include:

1. The event record, and EMT/PS-D form shall be sent to the BHDMD or designee within 24 hours of the run.
2. Event record shall be forwarded to the assigned Base Hospital representative within seven (7) days of incident.
3. Event record will be handled in accordance with Base Hospital medical records policy.
4. Event record is utilized for quality assurance and continuing education purposes only per San Diego County policy D-721.

B. Transfer of patient data may occur between the Base Hospitals, provider agencies and Division of Emergency Medical Services for continuing education and quality assurance purposes.

Approved:

Gail F Cooper

Administration

Medical Director

SUBJECT: Esophageal Tracheal Airway Device Data Collection and Evaluation **Date: 2/15/99**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170 and 1797.204.

II. Purpose: To establish a data base to effectively evaluate San Diego County's Esophageal Tracheal Airway Device (ETAD or "Combitube^{R}") System.

III. Policy: Data essential to the evaluation of the ETAD System in San Diego County shall be collected by the Division of Emergency Medical Services (EMS) in conjunction with base hospitals and provider agencies.

A. Minimum data to be collected for all patients that meet criteria for ETAD insertion shall include:

1. Age of patient.
2. Sex.
3. Type of call - medical or trauma.
4. Person and agency providing care.
5. Number of attempts (successful vs. unsuccessful).
6. Explanation if patient met criteria, and there was no ETAD insertion.
7. Base hospital
8. Time interval between BLS and ALS arrival.
9. Field complication (if any) with insertion.
10. Was ETAD replaced in field with ET?
    a. why?
    b. by whom?
    c. when?
11. Field 0_2 saturation acquired by pulse oximeter (if available).
12. ABGs on ED arrival (if available).

Approved:

Gail F Cooper
Administration

M.D. [illegible]
Medical Director

13 Patient status (survived/expired).

B. The above patient data shall be sent to the controlling base hospital within 48 hours for entry into the QA Net.

C. Data collected shall be used for system and patient care improvements, assuring confidentiality of patient records.

D. The Division of Emergency Medical Services shall distribute quarterly reports, summarizing data received, to provider agencies and base hospitals.

Approved:

Gail F Cooper

Administration

M.D. [illegible]

Medical Director

SUBJECT: PARAMEDIC BASE HOSPITAL DESIGNATION **Date: 07/01/05**

I. Authority: Health and Safety Code, Sections 1797.204, 1797.220, 1798.2, 1798.100, 1798.102, and 1798.104.

II. Purpose: To establish a mechanism for designation of an acute care hospital as a Paramedic Base Hospital.

III. Policy:

A. To be designated as a Paramedic Base Hospital in San Diego County, the requesting institution must:

1. Comply with California Administrative Code, Title 22, Division 9, Chapter 4.
2. Enter into a contract with the County of San Diego, Health and Human Services Agency, Emergency Medical Services (San Diego County EMS) to perform as a Base Hospital.
3. Comply with the County of San Diego's Base Hospital Contract.

B. San Diego County EMS shall review the Contract with each Paramedic Base Hospital every three years. The Base Hospital Contract may be changed, renewed, canceled, or otherwise modified when necessary according to provisions for such in the Contract.

C. San Diego County EMS may deny, suspend, or revoke the approval of a Paramedic Base Hospital for failure to comply with applicable policies, procedures, protocols, or regulations in accordance with provisions for such in the Contract.

D. Additional Paramedic Base Hospitals may be added to the Emergency Medical Services System on the basis of demonstrated local need.

1. Demonstrated local need shall include, but not be limited to an assessment of:
   a. Base Hospital call volumes.
   b. Base Hospital ALS unit and prehospital personnel assignments.

Approved:

Administration **EMS Medical Director**

c. Current system effectiveness.

2. County of San Diego EMS, shall review the need for supplemental Base Hospitals annually.
3. Changes in the EMS System as it relates to the number of Base Hospitals shall be forwarded to the Board of Supervisors for approval.

IV. Procedure:

A. San Diego County EMS develops a Request for Proposal (RFP) for Base Hospital Designation based on previously identified need and established Base Hospital criteria for submittal to Board of Supervisors for approval.

B. San Diego County EMS evaluates proposals, including independent review process and on-site evaluation.

C. San Diego County EMS recommends to the Board of Supervisors the addition of Base Hospital in accordance with established County Policies and State Regulations.

D. San Diego County EMS shall approve the newly designated Base Hospital's implementation plan. The implementation plan shall include, but is not limited to, the following:

1. Evidence of a continuous quality improvement process that can incorporate into the Local and State EMS Plans, inclusive of policies, procedures and protocols.
2. Evidence of the ability to provide initial and continuing prehospital education to all categories of prehospital personnel.
3. Community outreach programs.
4. Orientation of the community to the hospital's new role.
5. Evidence of ability to collect and manage data.

Approved:

Administration **EMS Medical Director**

6. Communications systems to include all satellite and other base facilities.

7. Time line of scheduled implementation.

Approved:

Administration **EMS Medical Director**

SUBJECT: DESIGNATION OF A PARAMEDIC BASE HOSPITAL **Date: 07/01/05**

I. Authority: Division 2.5, Health and Safety Code, Section 1798.100 through 105.

II. Purpose: To establish a mechanism for termination of Paramedic Base Hospital designation.

III. Policy:

A. Termination for Cause:

1. County of San Diego, Health and Human Services Agency Emergency Medical Services Branch (EMS Branch) may immediately terminate the Base Hospital Contract if a Base Hospital's license to operate as a general acute care hospital is revoked or suspended.
2. County of San Diego may immediately suspend its Contract upon written notice if a Base Hospital is in gross default of material obligation under its agreement, which default adversely affects patient care.
3. For any other material breach of its agreement, County of San Diego may terminate a Base Hospital Contract for cause, if the cause is not cured within 15 days after a written notice specifying the cause is delivered. Such cause shall include, but not be limited to:
   a. Failure to comply with material terms and conditions of the Base Hospital Contract, after notice of the failure has been given.
   b. Failure to make available sufficient personnel as required by the Contract.
   c. Gross misrepresentation or fraud.
   d. Substantial failure to cooperate with the County's monitoring of Base Hospital

Approved:

Administration **EMS Medical Director**

services.

e. Substantial failure or refusal to cooperate with quality assurance and audit

f. findings and recommendations within a reasonable time.

4. If, within the fifteen (15) days after delivery of the written notice of cause, the material breach has not been cured to the reasonable satisfaction of the County's representative, then the County may terminate the Base Hospital Contract effective as of a date specified in a written notice of termination delivered thereafter.

5. If, after notice of termination of the Base Hospital contract for cause, which is not voluntarily withdrawn as stated above, it is determined for any reason that the Base Hospital was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience agreement.

B. Termination for Convenience:

Either the County or the Base Hospital may terminate the Base Hospital contract, upon thirty (30) days written notice to the other party, as a termination for convenience.

C. Upon the de-designation of a Base Hospital, the local EMS Agency shall be responsible for system redesign decisions.

Approved:

Administration **EMS Medical Director**

SUBJECT: TRAUMA CARE FUND **Date 7/1/2002**

I. **Authority:** Health & Safety Code, Division 2.5, Chapter 2.5, Section 1797.198, 1797.199

II. **Purpose:** To establish a process for the administration and disbursement of fiscal resources in the Trauma Care Fund to trauma centers based upon submission of trauma registry data

III. **Definitions:**

Trauma Registry Inclusion/Exclusion Criteria –
ICD-9 code ranging between 800 to 959.9
and
Trauma center admission to a hospital **and** seen by a trauma surgeon
or
Trauma related death **and** ICD-9 code ranging between 800 to 959.9
or
Interfacility transfer in/out for a higher level of trauma care **and** ICD-9 code ranging between 800 to 959.9.
Does not include patients discharged by the Emergency Department or Trauma consult patients who were not admitted to the trauma service.

IV. **Policy**

A. The Trauma Care Fund has been established as a means to administer and distribute monies from the State Treasury Trauma Care Fund which have distributed to the Local Emergency Medical Services Agency based upon trauma registry data.

B. The County will allocate 1% of any monies received into the trauma care fund for administrative costs.

C. If additional State Treasury Trauma Fund monies are available after the minimal trauma center distribution, the County shall submit a request to the EMS Authority for additional funding. The County will develop a methodology for distribution of any additional monies above the minimum amount per trauma center that are received into the Trauma Care Fund. The Trauma Administrators Committee will function as an advisory committee to the County on distribution of the Trauma Care Fund.

D. An application will be made to the EMS Authority for any additional trauma centers, which are designated within the County after July 1 and before January 1 of any fiscal year in which funds are distributed.

E. If a designated trauma center de-designates prior to June 30 during a fiscal year in which it has received Trauma Care Funds, the trauma center will pay back to the County a pro rata portion of the funds it has received. The returned monies will then be distributed to the remaining trauma centers. If no designated trauma centers remain within the County, the County will return the monies to the EMS Authority.

Approved:

Steven Jones — **Administrator**

MD — **Medical Director**

F. A contract will be completed for each designated trauma center receiving monies from the Trauma Care Fund. The contract will include:

1. Trauma registry data transmission to the County for the purposes of Trauma Care Fund distribution.

2. Invoice mechanism for the distribution of the minimum amount of $150,000.00 for each Level I and Level II.

3. Distribution methodology for any remaining monies in the Trauma Care Fund.

4. Report to the County on how the funds were used to support trauma services.

G. The County will conduct an annual audit of the Trauma Care Fund Contract. The audit will include monitoring for compliance with:

1. Data submission requirements

2. Distribution methodology

3. Appropriate spending of Trauma Care Fund monies on trauma services.

H. The County will provide trauma registry data to the Emergency Medical Services Authority within 45 days of each request.

I. The County will utilize the standardized reporting criteria of trauma patients to the State Trauma Registry by July 1, 2003 or as determined by the EMS Authority.

J. The County will provide to the EMS Authority an annual fiscal year report by December 31 following any fiscal year in which Trauma Care Funds were distributed.

Approved:

Steven Jones MD

Administrator **Medical Director**

SUBJECT: TRAUMA CATCHMENT SERVICE AREA **Date: 7/1/2002**

I. **Authority:** Division 2.5 Health & Safety Code, Section 1798.161, 1798.163

II. **Purpose:** To designate catchment service areas for each designated trauma center.

III. **Definitions:**

Trauma Catchment Area – Geographic Area with defined boundaries assigned to a designated trauma center for purposes of care of patients identified as trauma candidates.

IV. **Policy:**

A. The adult patient who is identified as a trauma candidate will be transported to the most appropriate adult trauma center assigned per geographic designation per policy T-460: Identification and Transportation of the Trauma Center Candidate, the Trauma Catchment Area Boundary Guidelines and the San Diego Trauma Catchment Maps.

B. The pediatric patient who is identified as a trauma candidate will be transported to the most appropriate pediatric trauma center per geographic designation per policy T-460: Identification and Transportation of the Trauma Center Candidate, the Trauma Catchment Area Boundary Guidelines and the San Diego Trauma Catchment Maps.

Approved:

Steven Jones
Administrator

Medical Director

SUBJECT: ROLE OF THE PEDIATRIC TRAUMA CENTER **Date: 7/1/2002**

I. **Authority:** Health & Safety Code, Division 2.5 Chapter 6.Section 1798.165 and 1799.205.

II. **Purpose:** To define the role and requirements of a designated pediatric trauma center.

III. **Definitions:**

Pediatric Trauma Center – a facility which has been designated by the San Diego County Division of Emergency Medical Services to provide comprehensive care to the injured pediatric patient <15 years of age, who meets major trauma candidate criteria.

IV. **Policy:**

A Pediatric Trauma Center shall:

A. Meet or exceed compliance standards set forth within the San Diego County Pediatric Trauma Center Agreement.

B. Participate in the Committee on Pediatric Emergency Medicine (COPEM), providing expertise in pediatric trauma care issues.

C. Participate in injury prevention and community education activities related to children.

Approved:

Steven Jones

Administrator

Medical Director

SUBJECT: TRAUMA CARE COORDINATION WITHIN THE TRAUMA SYSTEM **Date: 7/1/2002**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.200 and 1798.163

II. Purpose: To define the coordination of trauma care within the San Diego County Emergency Medical Services System, and with neighboring jurisdictions.

III. Policy

The Health & Human Services Agency, Division of Emergency Medical System (EMS) is required to assure coordination of trauma care services and trauma system compliance with state and local regulations. This shall be accomplished through the following System design that assures:

A. Adequate numbers of trauma centers to meet the needs of the population and incidents of trauma in the county.

B. A coordinated response for the provision of advanced life support (ALS) and trauma care services within and around San Diego County through ALS inter-county agreements with neighboring and remote EMS jurisdictions.

C. Active duty military personnel and their dependants involved in traumatic incidents are integrated into the San Diego County Trauma System.

D. System oversight to assure that patients needing trauma services receive such services, including:

1. Transportation of trauma patients to designated trauma facilities.

2. Required personnel and resources to provide the appropriate level of service are available at designated trauma facilities.

3. The trauma registry is maintained for the purpose of monitoring system operations.

4. A quality monitoring system that assures compliance with all applicable state laws, regulations and local policies, procedures and contractual arrangements.

5. Public awareness and education on injury prevention.

Approved:

Steven Jones

Administrator

Medical Director

SUBJECT: DESIGNATION OF A TRAUMA CENTER **Date: 7/1/2002**

I. **Authority:** Division 2.5 Health and Safety Code, Section 1798.164, 1798.165

II. **Purpose:** To define the process and procedure for designating a Trauma Center to the Trauma Care System.

III. **Definitions:**

IV. **Policy**

A. The need for additional designated Trauma Centers shall be determined by the Health & Human Services Agency, Division of Emergency Medical Services. An additional Trauma Center may be added to the Trauma Care System on the basis of demonstrated local need, which shall include, but not be limited to an assessment of:

1. Prehospital response times
2. Population shifts/increases
3. Current system effectiveness
4. Available prehospital/hospital resources

B. The Board of Supervisors shall approve recommendations as to the number of Trauma Centers.

C. The designation of an additional trauma center will via a competitive bid process.

D. Upon designation, each trauma center will pay an initial and thereafter annual fee of $40,000.00 per year to the County of San Diego, Division of Emergency Medical Services.

Approved:

Steven Jones
Administrator

Medical Director

E. The designation of a trauma center for purposes of the Emergency Medical Services System of the County of San Diego confers upon the facility, the recognition that it has the commitment, personnel and resources necessary to provide optimum medical care for the trauma patient.

F. Each trauma center shall meet the criteria set forth in the trauma center agreement and demonstrate a continuous ability and commitment to comply with policies, protocols and procedures developed by the Division of Emergency Medical Services.

G. Each trauma center shall undergo an annual performance evaluation based upon the trauma center agreement. Results of the evaluation shall be made available to the facility.

H. All designated trauma centers shall participate in the quality improvement process per the Quality Assurance Manual.

V. Procedure:

A. Health & Human Services Agency, Division of Emergency Medical Services develops and distributes a Request for Proposal (RFP) for Trauma Center Designation.

B. Health & Human Services Agency, Division of Emergency Medical Services evaluates the proposals, including independent review process and on-site evaluation and makes recommendations to the Board of Supervisors.

Approved:

Gwen Jones
Administrator

Medical Director

SUBJECT: DE-DESIGNATION OF A TRAUMA CENTER **Date: 7/1/2002**

I. Authority: Division 2.5, Health and Safety Code, Section 1798.163.

II. Purpose: To establish a policy and procedure for de-designation of a trauma center.

III. Policy

A. Termination for Cause:

1. County may immediately terminate its Trauma Center Agreement if a trauma center's license to operate as a general acute care hospital is revoked or suspended.
2. County may immediately suspend its Agreement upon written notice if a trauma center is in gross default of material obligation under its Agreement, which default could adversely affect patient care provided by Contractor.
3. For any other material breach of its agreement, County may terminate a trauma center contract for cause, per the language of the Agreement. Such cause shall include, but not be limited to:
   a. Failure to comply with material terms and conditions of the trauma center contract, after notice of the failure has been given.
   b. Failure to make available sufficient, qualified personnel and hospital resources to provide immediate care for trauma patients as required by Section C of the contract.
   c. Failure to provide timely surgical coverage for trauma patients as required by Section C of the contract.

Approved:

Steven Jones
Administrator

Medical Director

d. Failure to provide physicians, surgeons, and other medical, nursing and ancillary staff who possess that degree of skill and learning ordinarily possessed by reputable medical personnel in like or similar localities and under similar circumstances for the provision of trauma center medical services.

e. Gross misrepresentation or fraud.

f. Substantial failure to cooperate with the County's monitoring of trauma center services and base hospital services.

g. Substantial failure or refusal to cooperate with quality assurance and audit findings and recommendations within a reasonable time.

B. Termination for Convenience:

Either the County or the Trauma Center may terminate the trauma center contract, as a termination for convenience per the language of the Agreement.

C. Upon the de-designation of a trauma center, the local EMS Agency shall be responsible for system redesign decisions.

Approved:

Administrator **Medical Director**

SUBJECT: TRAUMA CENTER BYPASS **Date: 7/1/2002**

I. **Authority:** Division 2.5, Health and Safety Code, Section 1798.163.

II. **Purpose:** To establish criteria for trauma center bypass.

III. **Policy:**

A. The in-house trauma surgeon is responsible for determining bypass status of his/her Trauma Center and will utilize the following criteria for making this determination. The Trauma Center may go on bypass status if one of the following criteria is met:

1. Time (30 minutes) is needed to obtain a backup trauma surgeon, neurosurgeon or anesthesiologist because the primary physician is occupied with another trauma patient.

2. Time (1 hour) is needed to identify a second operating room because the primary room is being utilized and another is not readily available.

3. Two or more trauma patients with major injuries are being resuscitated in the trauma room (1 hour).

4. The hospital is closed due to internal disaster.

5. The trauma center is activated during an external disaster (Annex D).

6. Time (1 hour) the CT scanner is being serviced or is broken. The trauma center can accept penetrating injuries excluding head or neck.

B. When a trauma center is on bypass, the patient should be redirected to another trauma center, taking into consideration transport time, the patient's medical needs and the institution's available resources.

C. Trauma center personnel will immediately enter both the initiation and reasons/conditions for bypass into the San Diego County EMS Wide Area Communication Network (QANet). At the time of change in condition of trauma center bypass status, trauma center personnel shall update the San Diego County EMS Wide Area Communication Network (QANet).

D. The trauma center will provide reviews of variations from this policy to the Medical Audit Committee via the Division of EMS as requested for purposes of trauma system quality assurance.

E. A trauma center should use its best efforts to limit bypass to less than 5% of the total available hours on a monthly basis.

Approved:

Gwen Jones

Administrator

Medical Director

SUBJECT: RESOURCES FOR TRAUMA TEAM RESPONSE **Date: 7/1/2002**

I. Authority: Health & Safety Code, Division 2.5, Section 1798.163

II. Purpose: To identify the trauma center resources, which must be available for trauma team activation

III. Definitions:

Immediately Available – means unencumbered by conflicting duties or responsibilities; responding when notified without delay; and being within the specified resuscitation area of the trauma center when the patient is delivered.

Promptly Available – means responding without delay when notified and requested to respond to the hospital; and being physically available to the specified area of the trauma center within a period of time that is medically prudent (within 30 minutes, 24 hours per day, 7 days per week).

IV. Policy

A. The following resources shall be available for trauma center candidates requiring full trauma team activation:

1. Immediately Available:
   a. Qualified Trauma Surgeon
   b. Emergency Department Physician
   c. Trauma Resuscitation Nurse responsible for the supervision of nursing care during the resuscitation phase
   d. Registered Nurse currently trained in trauma patient care to perform care duties, scribe, etc
   e. Respiratory Therapy
   f. Radiology
   g. Laboratory
   h. Operating Room
   i. Pharmacy
2. Promptly Available:
   a. Trauma Consultants as requested by the Trauma Surgeon

B. Trauma center candidates not requiring full trauma team activation require, at a minimum, the following resources with a physical evaluation by the Trauma Surgeon:

1. Qualified Trauma Surgeon
2. Emergency Department Physician

Approved:

Steven Jones

Administrator

Medical Director

3. Registered Nurse currently trained in trauma patient care.

C. The use of a tiered trauma response is encouraged in an effort to conserve resources and reduce the cost of trauma care.

D. All departments involved in the delivery of trauma care must have equipment and supplies for all ages of patients as approved by the Medical Director of the Service in collaboration with the Trauma Medical Director.

Approved:

Steven Jones

Administrator

Medical Director

SUBJECT: TRAUMA SERVICE CONSULTATION FOR THE COMMUNITY **Date: 7/1/2002**

I. **Authority:** Health & Safety Code, Division 2.5, Health and Safety Code, Section 1798.163.

II. **Purpose:** To establish the criteria for trauma consultation with community physicians.

III. **Policy**

A San Diego County Trauma Center shall provide:

A. Medical consults with community physicians and providers regarding the immediate management of trauma patients.

B. Trauma care information, education and follow-up to other medical care providers in their service area on a routine basis. The Trauma Medical Director or designee shall meet with satellite hospital personnel for this purpose when necessary.

Approved:

Administrator **Medical Director**

SUBJECT: TRANSFER OF STABLE TRAUMA SERVICE HEALTH PLAN MEMBERS **Date: 7/1/2002**

I. **Authority:** Health and Safety Code, Division 2.5, Sections 1798.163 and 1798.172

II. **Purpose:** To establish guidelines for transfer of stable trauma patients to their health plan's facility.

III. **Policy**

A. It is the intent of the trauma system to transfer stable trauma patients to their health plan provider's facility when requested, as long as such transfer is medically prudent and in the best interest of the patient. All requests/discussions concerning transfer status of the patients will be made physician to physician. Transfer agreement will be based on patient condition and appropriateness of receiving facility resources.

B. Unless otherwise decided by the trauma surgeon of record, no patient requiring acute care admission will be transferred to a hospital that is not a designated trauma center in less than twenty-four hours.

C. The decision as to transfer of post-operative, intensive care or other acute care patients lies solely with the trauma surgeon of record.

D. Hospitals which have accepted transfer of a trauma patient from a designated trauma center shall:

1. Provide the information required to complete the trauma registry on that patient to the transferring trauma center.

2. Participate in system and trauma center quality improvement activities for that patient who has been transferred.

E. Trauma center candidates cared for at San Diego County designated trauma centers may require extensive diagnostic evaluation or immediate treatment. Trauma center evaluation does not necessitate pre-approval by the patient's insurer.

Approved:

Steven Jones
Administrator

Medical Director

SUBJECT: TRAUMA CENTER INJURY PREVENTION ACTIVITES **Date: 7/1/2002**

I. **Authority:** Health & Safety Code, Division 2.5 Chapter 6 Section 1798.163

II. **Purpose:** To establish minimum standard for designated trauma center injury prevention activities/programs.

III. **Policy:**

A. Each designated trauma center will participate in injury prevention activities.

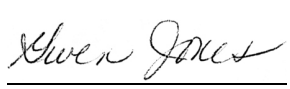
B. Prevention activities may be autonomous or collaborative with existing organizations/agencies and/or other designated trauma centers (individually or as a system).

C. Injury prevention topics will be based upon:

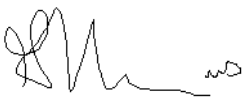
1. Identification of injury trends through utilization of the trauma registry.
2. Community mortality data provided by the Medical Examiners Office.
3. Community identified injury risks (may be seasonal).

D. Prevention activities/programs will be based upon identified need and include objective goals and outcome evaluation.

Approved:



Administrator



Medical Director

SUBJECT: PUBLIC INFORMATION & EDUCATION ON TRAUMA SYSTEMS **Date: 7/1/2002**

I. **Authority:** Health & Safety Code, Division 2.5 Chapter 6, Section 1798.163, California Code of Regulations, Title 22, Division 9, Section 100255 (r).

II. **Purpose:** To establish minimum standards for designated trauma centers to participate in public information and education about the trauma system.

III. **Policy**

A. Each designated trauma center will participate in providing the public/community with information and education regarding the San Diego County Trauma System.

B. Public Information and Education programs may be autonomous or collaborative with existing organizations/agencies and/or with other designated trauma centers.

C. Public Information and Education may be incorporated into Injury Prevention Programs and other public information venues.

Approved:

Administrator **Medical Director**

SAN DIEGO COUNTY DIVISION OF EMERGENCY MEDICAL SERVICES **No. T-719**
POLICY/PROCEDURE/PROTOCOL **Page: 1 of 1**

SUBJECT: TRAUMA PROVIDER MARKETING AND ADVERTISING **Date: 7/1/2002**
Draft

I. **Authority:** Health & Safety Code, Division 2.5, Sections 1789.163, 1798.165

II. **Purpose:** To provide a guideline for the utilization of the trauma terminology in marketing and advertising by a trauma care provider within the San Diego Emergency medical Services System.

III. **Policy**

The Division of Emergency Medical Services (EMS) has the responsibility to authorize use of the term "Trauma" in marketing and advertising by any health or trauma care provider.

A. In accordance with Section 1798.165 of the Health & Safety Code, "No health care provider shall use the terms; trauma facility, trauma hospital, trauma center, trauma care provider, trauma vehicle or similar terminology in its signs or advertisements, or in printed materials and information it furnishes to the general public, unless the use is authorized by the local EMS agency".

B. Requests for such authorizations are to be submitted to the EMS Coordinator for Trauma at the Division of Emergency Medical Services.

Approved:

Steven Jones
Administrator

Medical Director

SUBJECT: DESIGNATION OF PUBLIC SAFETY- AUTOMATED EXTERNAL DEFIBRILLATOR BASE HOSPITAL **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204, 1797.220, 1798, 1798.2, 1798.100 and 1798.104, California Code of Regulations Title 22, Division 9, Chapter 2, Section 100063.1.

II. Purpose: To establish a standard mechanism for approval and designation as a Public Safety Automated External Defibrillator (PS AED) Base Hospital.

III. Policy:

A. To be designated as a PS AED Base Hospital in San Diego County, the requesting institution shall be currently designated as a Base Hospital complying with all requirements, policies, procedures and protocols for a Base Hospital in San Diego County.

B. A PS AED Base Hospital may delegate any or all of the following to a specified satellite hospital or provider agency if approved by the Base Hospital Medical Director:

1. Field care audits.
2. Structured training sessions.
3. Defibrillation skill proficiency demonstrations.

Approved:

Administration **Medical Director**

SUBJECT: QUALITY ASSURANCE FOR EMERGENCY MEDICAL TECHNICIAN OR PUBLIC SAFETY AUTOMATED EXTERNAL DEFIBRILLATOR **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204, 1798 and 1798.102.

II. Purpose: To establish minimum requirements for quality control and assurance of appropriate patient care.

III. Policy:

A. The Public Safety (PS) Automated External Defibrillator (AED) provider agency physician or the EMT Automated External Defibrillator (AED) agency coordinator shall establish policies and procedures to review runs to include the following:

1. Written documentation of compliance/noncompliance of protocols on each run; information to be obtained from the event record.
2. All shockable rhythms to identify trends or deficiencies and follow-up according to Base Hospital quality assurance process.

B. Prehospital issues reportable to Prehospital Audit Committtee (PAC).

1. Malfunctions of the AED machine.
2. Functioning outside of the scope of practice.
3. Variation of policies/protocols.
4. Deviations from safety guidelines.

C. The following deviations and deficiencies shall be reported verbally to San Diego County Emergency Medical Services within 48 hours with written documentation to follow.

1. Functioning outside of the scope of practice.

Approved:

Administration **Medical Director**

2. Deviations from safety guidelines resulting in injury.

D. The PS AED provider agency physician or the EMT AED agency coordinator and agency shall establish policies to deal with event record storage, retrieval, and disposal. The event record is to be utilized for quality assurance and continuing education purposes only.

Approved:

Administration **Medical Director**

I. Authority: Health & Safety Code, Division 2.5, Sections 1797.204, 1797.206, 1797.218, 1797.220; California Code of Regulations, Division 9, Chapter 4, Article 5.

II. Purpose: To approve and designate Paramedic service providers in San Diego County.

III. Definitions:

A. Advanced Life Support (ALS) response: Any medical aid call in which Paramedics are dispatched to the scene on a ground transporting unit, and/or any call that has been screened or prioritized in accordance with an approved dispatch plan as necessitating an advanced life support level of response.

B. Approved Dispatch Plan: A dispatch plan approved by the San Diego County Emergency Medical Services (EMS).

C. Local Jurisdiction: a local jurisdiction is the County, a city, water district, fire protection district, or county service area.

IV. Policy:

A. To be designated as a Paramedic service provider in San Diego County, a local jurisdiction or air ambulance provider designated as a primary response air ambulance in accordance with the San Diego County Ambulance Ordinance, shall:

1. Enter into a written agreement with the County of San Diego to perform as a Paramedic service provider.
2. Provide ALS service on a continuous 24- hours per day basis.
3. Provide emergency medical responses in accordance with the following requirements:
   a. Ground ALS Response: Ensure that at least two Paramedics are initially responded to each ALS response, and that a ground transport vehicle is

simultaneously dispatched to all ALS responses, unless an alternate dispatch plan which has been approved by the EMS is in effect. In systems which respond ALS first responder units, the ALS first responder shall be equipped in accordance with EMS Policy P-806 "ALS First Responder Inventory".

b. Air Ambulance Response: Ensure that all primary response air ambulances are staffed in accordance with the provisions of the San Diego County Ambulance Ordinance, maintaining a minimum staffing level of one registered nurse and one Paramedic as flight crew.

4. Require that Paramedics establish base hospital contact as outlined in San Diego County Emergency Medical Services Policy S-415.
5. Require that paramedics maintain current American Heart Association CPR/Health Care Provider status or American Red Cross equivalent.
6. Require that all Paramedics working as a part of the EMS system maintain San Diego County Paramedic Accreditation (Policy P-305).
7. Integrate with a first responder system.
8. Enter into mutual aid agreement with adjoining Paramedic agencies whenever possible.
9. Establish the following planned response times:
   a. Provide for a planned maximum ground ALS response time of no more than *30 minutes 90% of the time* in rural areas and no more than *10 minutes 90% of the time* in urban areas. In systems that incorporate ALS First Responders, the provider shall plan for a maximum ALS First Responder arrival time of *8 minutes 90% of the time* with a maximum ALS ground transport response time

of *12 minutes 90% of the time*.

10. Cooperate with the paramedic training agencies in providing paramedic field internship placements.
11. Provide orientation for first responder agencies to advanced life support functions and role.
12. Designate an agency paramedic coordinator.
13. Submit prehospital patient records via approved San Diego County EMS Form 104 or via electronic means.(as per Policy S-602).
14. Agree to participate in community education programs to teach the public 911 access and CPR.
15. Submit to the Division of EMS, evidence of compliance with the California Code of Regulations, Title 22, Division 9, Chapter 4, Article 5.
16. Participate in the County of San Diego EMS Quality Improvement Plan based on state and county regulations and policies.
17. Assess the current knowledge of their paramedics in local policies, procedures and protocols and skills competency.
18. Contract with a designated base hospital to provide medical direction and supervision to assigned air medical Paramedic personnel (designated primary response air ambulance providers only).

B. The County of San Diego shall:

1. Approve paramedic curriculum and training programs.
2. Provide standard for accreditation/authorization and reaccreditation/ reauthorization of Paramedics and MICNs in the County.

Approved:

Administration **Medical Director**

3. Contract with designated base hospitals to provide immediate medical direction and supervision of assigned prehospital personnel.
4. Provide prehospital patient record forms or alternate electronic reporting mechanism
5. Review agreements with each Paramedic service provider every two years.

Approved:

Administration **Medical Director**

SUBJECT: Recovery of Prehospital Patient Care Reusable Equipment Date: 7/1/99

I. Authority: Health and Safety Code, Division 2.5, Section 1797.204.

II. Purpose: To secure and return reusable equipment to the prehospital care provider.

III. Policy:

A. All participants in the EMS system shall facilitate the return of properly labeled equipment to the owner agency.

B. All agencies in the EMS system agree to buy and stock enough equipment so as not to be dependent upon another agency for immediate item replacement/exchange when faced with normal average workloads.

IV. Procedure:

A. Prehospital Agency Responsibilities:

1. Agencies shall permanently label all reusable equipment in the following manner:

a. Agency name and telephone number.

b. "Return to Emergency Department." (optional)

2. Agencies shall make their best effort to recover equipment within seven (7) days.

3. Prehospital personnel shall log equipment as required by their agency.

B. Hospital Responsibilities:

1. Hospitals shall provide a logbook or similar mechanism to assist in keeping track of equipment left in the hospital.

2. Hospitals shall be responsible for security on reusable prehospital equipment left in the hospital for up to seven (7) days, when the provider agency has:

a. Clearly labeled equipment with agency name and telephone number.

b. Agency personnel have provided written documentation regarding equipment left in the hospital in the log provided for equipment identification.

Approved:

Administration **Medical Director**

3. Hospitals shall not release equipment to any agency but the owner agency, unless there is prior approval by the owner agency.
4. Hospitals shall make every attempt to remove visible contaminants prior to placing equipment in a common storage area.
5. Contaminated equipment that cannot be visibly cleaned will be put in a non-red transparent bag, labeled "BIOHAZARD - TO BE CLEANED."

Approved:

Administration **Medical Director**

SUBJECT: **ALTERNATE EMT-PARAMEDIC SERVICE PROVIDER APPLICATION/DESIGNATION**

Date: 9/1/91

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.201, 1797.204, 1797.218, and 1797.224.

II. Purpose: To encourage the establishment of new advanced life support (ALS) services in low population density areas that have demonstrated hardship in establishing services at the community standard of care.

III. Definitions:

A. Alternate Advanced Life Support (ALS): ALS provided in low population density areas utilizing an EMT-Paramedic staffing option other than the current community standard in San Diego County.

B. Community Standard: two (2) EMT-paramedics on each advanced life support unit with twenty-four (24) hour per day coverage and a response time of ten (10) minutes or less (urban) and fifteen (15) minutes or less (rural) 90% of the time.

C. Low population density area: service area wherein a population does not exceed 750 residents per square mile and is not less than 100 residents per square mile, or where sufficient non-resident or other usage can be demonstrated to justify the service.

D. Hardship is one or more of the following situations:

1. Financial hardship such that service at the community standard of care is impossible.
2. A local system or organizational hardship such that:
   a. Service cannot be made generally available throughout the service area within established response time guidelines utilizing a community standard service configuration; or
   b. Service cannot be made available through eligible provider at the community standard without compromising other public safety mission requirements; or
   c. No new provider can or will enter the service area and provide service at the community standard.

Approved:

Gail F Cooper

Administration

M.L. McCann MD

Medical Director

IV. Procedure:

A. Application Process:

1. Submit a letter of intent to establish ALS services, in writing, to the Health and Human Services Agency, Division of EMS.
2. Conduct a competitive bid process pursuant to Health and Safety Code, Division 2.5, Section 1797.224, and in accordance with local policies.
3. Following a competitive bid process, submit to the Division of EMS:
   a. Copy of all proposals or responses received.
   b. Statement of need of ALS services in defined area.
   c. Data which supports a claim of hardship in establishing ALS services in accordance with established current community standards.
   d. Description of alternate ALS model proposed.
   e. Description of financial viability for alternate program.
   f. Other special issues unique to the community which may directly or indirectly impact the ability to provide ALS services at the community standard of care.
4. Within 90 days of receipt of above documents, the Division of EMS will:
   a. Review all documents.
   b. Conduct a community survey (on an as needed basis).
   c. Make a determination of the need for alternate ALS to the specified community.
   d. Notify the applicant(s) of the final decision and any recommendations or suggestions for implementation.

Approved:

Gail F Cooper — **Administration**

M.L. McCann MD — **Medical Director**

B. Designation Process:

1. To be designated as an alternate EMT-Paramedic service provider in San Diego County, a local jurisdiction (a local jurisdiction is the County, a city, water district, fire protection district, or county service area), which has been approved by the County of San Diego to provide alternate ALS services must:
   a. Comply with California Code of Regulations, Title 22, Division 9, Chapter 4.
   b. Enter into an Agreement with the County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services to perform as an alternate EMT-Paramedic service provider agency.
   c. Comply with all responsibilities of the contractor as outlined in Exhibit A.
2. The County of San Diego, Department of Health, Division of EMS shall review the Agreement with the alternate EMT-Paramedic service provider every two (2) years. The Agreement may be changed, renewed, canceled, or otherwise modified when necessary according to provisions for such in the Agreement.
3. The County of San Diego, Division of EMS may deny, suspend, or revoke the approval of an alternate EMT-Paramedic service provider agency for failure to comply with applicable policies, procedures, protocols, or regulations in accordance with provisions for such in the Agreement.

Approved:

Gail F Cooper

Administration

M.L. McCann MD

Medical Director

EXHIBIT A

RESPONSIBILITIES OF THE CONTRACTOR

1. To provide EMT-Paramedic Services within the boundaries of its local jurisdiction, and within adjoining areas as specified by Agreements with adjoining EMT-Paramedic Service Providers.
2. To participate in the Advanced Life Support (ALS) Program in accordance with Title 22 of the California Code of Regulations, Division 9, Chapter 4.
3. To develop and operate EMT-Paramedic Services in accordance with California Code of Regulations, Title 22, Division 9, Chapter 4. The **CONTRACTOR** may subcontract all or a portion of these services. However, the **CONTRACTOR** is responsible for insuring that any and all subcontractors provide services in accordance with California Code of Regulations, Title 22, Division 9, Chapter 4.
4. To maintain and operate at least one fully equipped, supplied and staffed EMT-Paramedic Unit seven days a week, twenty-four (24) hours a day, in accordance with the Policies, Procedures and Protocols established by San Diego County.
5. To staff each unit with at least one (1) EMT-P at all times. For the purpose of this Agreement, an EMT-P is an individual certified in the State of California as an EMT-Paramedic, and accredited by the San Diego County Emergency Medical Services Medical Director to operate as an EMT-Paramedic in San Diego County, pursuant to Section 1797 et seq. of the Health and Safety Code.
6. To staff each unit with at least one (1) EMT-IA at all times. For the purpose of this Agreement, an EMT-IA is an individual certified in the State of California to operate as an EMT-IA, pursuant to Section 1797 et seq. of the Health and Safety Code.
7. To provide the citizens of the local jurisdiction with information on the 9-1-1 system and where and how to obtain Cardiopulmonary Resuscitation (CPR) training.
8. To ensure that all EMT-Paramedic personnel comply with the continuous accreditation requirements of the **COUNTY**.

EXHIBIT A

RESPONSIBILITIES OF THE CONTRACTOR (continued)

9. To provide suitable facilities for housing the EMT-P unit(s).

10. To cooperate with the approved EMT-Paramedic training programs in providing field internship locations for paramedic interns.

11. To develop mutual aid and/or call-up plans for providing EMT-Paramedic Service in an area in the event the ambulance assigned to the area is not operable, or is away from the area for other reasons. Automatic response plans may be developed by the local jurisdiction with concurrence of adjoining EMT-Paramedic services.

12. To notify the Chief, Division of Emergency Medical Services, or designee, immediately whenever any condition exists which adversely affects the local jurisdiction's ability to meet the conditions of this Agreement.

13. To appoint an Agency Paramedic Coordinator, to serve as liaison between the Agency, the County, base hospitals, receiving hospitals, BLS provider agencies and public safety agencies operating within the service area.

14. To provide orientation for first responder agencies to advanced life support functions and role.

15. To provide for a planned maximum response time of no more than fifteen (15) minutes in rural areas and no more than ten (10) minutes in urban areas.

16. To participate in local Emergency Medical Service planning activities, including disaster management.

17. To comply with all applicable State statutes and regulations and County standards, policies, procedures and protocols, including a mechanism to assure compliance.

18. To implement and maintain a Quality Assurance program.

19. To take immediate corrective action where there is a failure to meet "Responsibilities of the **CONTRACTOR**".

SUBJECT: ADVANCED LIFE SUPPORT FIRST RESPONDER UNIT **Date: 07/01/04**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.204, 1797.218, and 1797.220.

II. Purpose: To offer a mechanism for designated paramedic service agencies in San Diego County to provide advanced life support (ALS) assessment and initial treatment to patients by paramedics prior to the arrival of a transporting unit.

III. Definitions:

A. An ALS first responder unit is defined as a non-transporting emergency response vehicle utilized by a designated paramedic service provider which is staffed by at least one (1) paramedic and one (1) EMT- Basic, and which complies with the operational criteria outlined in this policy.

B. An ALS transporting unit is defined as an emergency response vehicle utilized for patient transport which is staffed with at least one (1) paramedic and one (1) EMT-Basic and which complies with the operational criteria as outlined in County of San Diego, Division of Emergency Medical Services (EMS) policy P-801.

C. A BLS transporting unit is defined as a response vehicle utilized for emergent or non-emergent patient transport which is staffed with two (2) EMT-Basics and which complies with the operational criteria as outlined in County of San Diego, Division of Emergency Medical Services (EMS) policy B-833.

IV. Policy:

A. Staffing for an ALS first responder unit in San Diego County shall include at a minimum one (1) paramedic and one (1) EMT-Basic. ALS first responder units shall be equipped with standardized inventory as specified in San Diego County Division of EMS policy P-806.

B. The closest/most appropriate, available ALS transporting unit shall be dispatched simultaneously with the ALS first responder unit if the response meets established criteria for dispatch of an ALS unit.

Approved:

Gwen Jones

Administration

Medical Director

C. If ALS care is initiated and an ALS transporting unit remains unavailable, the ALS first responder unit paramedic shall accompany the patient to the hospital in a BLS transporting unit.

D. Each ALS first responder unit will be assigned to a Base Hospital for medical control, by the local EMS agency.

E. Approved service provider agencies shall have a current ALS service provider agreement with the San Diego County Division of EMS.

V. Procedure:

A. Application/Approval Process:

Application for use of ALS first responder unit(s) shall be submitted in writing to the Medical Director, San Diego County Division of Emergency Medical Services and shall include:

1. Identification, location, and average response times of the transporting ALS unit assigned to the geographical area.
2. Identification, location, and average response times of the proposed ALS first responder unit(s).
3. Description of the proposed ALS first responder unit staffing, to include level(s) of training.
4. A statement indicating what optional equipment (if any) will be included in the inventory of the ALS first responder unit.

B. Operational Requirements:

When the ALS first responder unit arrives on scene prior to the transporting ALS unit, the ALS First Responder paramedic shall:

1. Assess and treat the patient.
2. If the First Responder paramedic does not accompany the patient to the hospital, transfer of care and information shall occur at the earliest most appropriate time to facilitate continuity of care and prevent any delay in care.

Approved:

Administration **Medical Director**

3. First Responder paramedics shall submit completed prehospital patient records in accordance with policy S-601.

Approved:

Administration **Medical Director**

SUBJECT: ALS First Responder Inventory **Date: 07/01/06**

I. Authority: Health and Safety Code, Division 2.5, Section 1797.204.

II. Purpose: To identify standardized inventory for all assessment units. Individual agencies may increase inventory to include all ALS medications, including controlled substances.

III. Policy: Essential equipment and supplies to be carried on each ALS first responder unit shall include at a minimum the following:

A. Airway Adjuncts:	Minimum
Airways-assorted sizes	
Aspiration based endotracheal tube placement verification device	2 each
Bag-Valve-Mask Device	1 each size
Esophageal Tracheal Double Lumen Airway Kit (Combitube): Reg, Small Adult	1 each
Intubation tubes: sizes: 2.5, 3.5, 4.5, 5, 6, 6.5, 7, 7.5, 8, 8.5, 9	1 each
Laryngoscope - blade: curved and straight sizes 2, 3, 4	1 each
Laryngoscope - handle	2 each
Magill tonsil forceps	1 each
O2 Cannula	2 each
O2 Masks	2 each
O_2 powered nebulizer	1 each
Stylet (pediatric, adult)	1 each
Suction catheters (5, 6, 8, 10, 12, 14, 18 fr)	1 each
Suction catheters, tonsil-tip (Yankauer)	2 each
Water soluble lubricant	1 each
End-tidal CO2 detector (pediatric *and* adult) **OR**	2 each
Quantitative (Capnography) End Tidal CO_2 (optional item)	1 each

B. Vascular Access/Monitoring Equipment	Minimum
Armboard: short	2 each
Blood glucose monitoring device	1 each
Blood pressure cuff - adult	1 each
Blood pressure cuff - pediatric	1 each
IV administrations sets: Macrodrip, Microdrip	1 each
IV tourniquets	2 each
Needles:	
IV cannula - 14 gauge	2 each
IV cannula - 16 gauge	2 each
IV cannula - 18 gauge	2 each
IV cannula - 20 gauge	2 each
IV cannula – 22 gauge	2 each
IV cannula – 24 gauge	2 each
Syringes: 1ml, 3ml, 5ml, 10ml, 20ml	2 each
Stethoscope	1 each

Approved:

Administration **Medical Director**

C	Splinting Devices:		Minimum
	Extrication Collars, Rigid		1 each
	Restraints, soft or leather		1 set
D	Packs:		Minimum
	Cold packs		2 each
	Drug Box		1 each
	Hot packs (warming, not to exceed 110 degrees F)		1 each
	Personal Protective Equipment (masks, gloves, gowns, shields)		2 each
	Trauma Box/Pack		1 each
E.	Other:		Minimum
	Thermometer-oral, rectal		1 each
F.	Communication Items:		Minimum
	Agency radio		1 each
	Communication Failure Protocol (laminated)		1 each
	EMS radio		1 each
G.	Replaceable Medications:		Minimum
	Adenosine	6mg/2ml vial	30 mg total
	Albuterol	2.5mg/3ml or 0.083%	4 vials
	ASA	81 mg/tab	4 tabs
	Atropine sulfate	1mg/10ml	3 each
	Atrovent	2.5ml (one unit dose vial) or 0.02%	2 each
	Dextrose, 50%	50 ml	2 each
	Epinephrine: 1:1,000	1 mg	2 each
	Epinephrine: 1:10,000	1 mg	4 each
	Lidocaine	100 mg	3 each
	Morphine Sulfate (Injectable)	10mg/ml	10 mg
	Naloxone HCL (Narcan)	1mg/ml	4 each
	Nitroglycerine:	0.4 mg	1 container
	Nitropaste w/papers		1 tube
	Oral Glucose		1 dose
	Versed (Midazolam)	5mg/ml	10 mg
	IV Solutions		
	Normal Saline - 1000 ml bag		2 each
	Normal Saline - 250 ml bag		2 each
H	Other Equipment		Minimum
	Broselow Tape		1 each
	Pediatric Drug Chart (laminated)		1set
	Standing Orders (Adult and Pediatric) [laminated]		1 set
	Defibrillator		1

Approved:

Carmel Angelo

Administration

Medical Director

SUBJECT: WILDLAND ALS KIT INVENTORY **Date: 07/01/06**

I. Authority: Health & Safety Code, Division 2.5, 1797.204.

II. Purpose: To identify minimum inventory for ALS Wildland Packs to be carried on Brush Rigs that may be sent out on a Strike Team. Individual agencies may increase inventory to include all ALS medications, including controlled substances.

III. Definitions:

ALS Wildland Packs – minimal inventory kits containing ALS medications and equipment that can be used by paramedics who staff apparatus sent out on a Fire Strike Team. The paramedics assigned to the rig to treat firefighters assigned to the strike team only will use this pack.

Wildland Strike Team –Personnel and units sent to other areas to fight Wildland fires

IV. Policy:

Essential equipment and supplies to be carried on each Wildland Fire Strike Team unit shall include at a minimum the following:

A. Airway Adjuncts:	**Minimum**
Bag-valve-mask ventilation assist	1 each
CO2 Detection Device	1 each (adult/)
Esophageal/Tracheal Airway Device	1 each (small/regular adult)
KY Jelly Packets	Reasonable inventory
Nasopharyngeal Airway Assists	1 each (Assorted Sizes)
Oropharyngeal Airway Assists	1 each Assorted sizes
Oxygen Powered Nebulizer	1 each
B. Vascular Access/Monitoring Devices	**Minimum**
Arm boards	1 each (long/short)
IV start Kits	2
IV Access Needles	2 each size (16-24)
Needles	2 19G
Normal Saline IV (1000ml) w/tubing	2 each
Syringes	1 each size (1ml, 5ml, 10ml)
C. Replaceable Medications	**Minimum**
Albuterol	2 vials
Atropine	2 Preload syringes
Atrovent	1 vial
ASA	4 tablets (81mg)
Benadryl	2 vials (25mg/ml)
Epinephrine 1:10000	3 Preload syringes (10 mls)
Epinephrine 1:1000	30 mg (0.5 ml)

Approved:

Carmel Angelo — **Administration**

Bruce Hyers — **EMS Medical Director**

C. Replaceable Medications (Cont)	**Minimum**
Dextrose (50%)	1 Preload Syringe
Glucose Tablets or paste	1dose
Morphine Sulfate	1 Preload Syringe (10 mg)
Nitroglycerine Spray	1
Nitropaste w/papers	1 tube/w/papers

D. Other essential equipment

BP Cuff	1
Goggles	2 pair
Gloves (non-latex)	8 pair
Stethoscope	1
Penlight	1
Trauma Shears	1 pair

Laminated copies of:

- Communication Failure Protocol (P-110)
- ALS Adult Standing Orders (P-111)

Approved:

Administration **EMS Medical Director**

SUBJECT: EMERGENCY MEDICAL TECHNICIAN OR PUBLIC SAFETY AUTOMATED EXTERNAL DEFIBRILLATOR SERVICE PROVIDER DESIGNATION **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.201,1797.204 and 1797.220.

II. Purpose: To establish a standard mechanism for approval and designation as a Emergency Medical Technician (EMT) or Public Safety (PS) Automated External Defibrillator (AED)

provider in San Diego County.

III. Policy: San Diego County Emergency Medical Services (EMS) shall approve and designate EMT and PS AED Providers who meet established criteria.

IV. Procedure:

A. Submit a written request for approval to the EMS Medical Director to include:

1. Description of intended use and population served.

2. For PS AED providers only, Agreement with a Base Hospital or Physician for medical control.

3. Agreement to meet and provide the following:

   a. Provide orientation of AED authorized personnel to the AED program in the agency, including County and agency policies and procedures.

   b. Ensure initial training (PS only) and, thereafter, continued competency of AED authorized personnel.

   c. Ensure maintenance of AED equipment.

   d. Authorize personnel and maintain a current listing of all AED service provider

Approved:

Administration **Medical Director**

authorized personnel and provide a listing to EMS.

e. Collect and report to EMS required data as per Policy D-620.

B. EMS shall review all information submitted. Agencies shall be notified in writing of approval or disapproval within thirty (30) days from receipt of request.

C. Approved EMT and PS AED provider agencies shall enter into a Memorandum of Agreement with San Diego County for EMT or PS AED services.

D. An EMT or PS AED service provider approval may be revoked or suspended for failure to maintain the requirements of applicable state and local regulations and policies.

Approved:

Administration **Medical Director**

SUBJECT: ESOPHAGEAL TRACHEAL AIRWAY DEVICE SERVICE PROVIDER DESIGNATION **Date: 07/01/05**

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204, and 1797.22.

II. Purpose: To establish a standard mechanism for approval and designation as an Esophageal Tracheal Airway Device (ETAD) provider in San Diego County.

III. Policy: San Diego County Emergency Medical Services (EMS) shall approve and designate ETAD providers which meet established criteria.

IV. Procedure:

A. Documentation of current ETAD program approval from EMS.

B. Enter into a Memorandum of Agreement with EMS for ETAD services within the particular area of jurisdiction.

C. Comply with the California Code of Regulations Title 22, Division 2, Chapter 2, Section 100064 (c).

Approved:

Pete Kemi

Administration

Medical Director

SUBJECT: AMBULANCE PROVIDER'S PERMIT APPLICANT PROCESS **Date: 07/01/03**

I. **Authority**: California Vehicle Code, Section 2512(c); Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose**: To establish the process by which agencies desiring to provide ambulance service in San Diego County would obtain an Ambulance Provider's Permit.

III. **Procedure**:

A. Application Process, Privately Owned Companies:

1. Submit a completed application, which contains the following information:
   a. Names and addresses of the applicant registered owner(s), partner(s), officer(s), director(s), and all shareholders that hold or control 10% or more of the stock of the applicants.
   b. Applicant's training and experience in the transportation and care of patients.
   c. Name(s) under which the applicant has engaged, does, or proposes to engage in ambulance service.
   d. Description of each ambulance including: the make, model, year of manufacture, vehicle identification number, current state license number, the current odometer reading of the vehicle and the color scheme, insignia, name monogram and other distinguishing characteristics of the vehicle.
   e. Statement that the applicant owns or has under his/her control, in good mechanical condition, required equipment to consistently provide quality ambulance service, and that the applicant owns or has access to suitable facilities for maintaining his/her equipment in a clean and sanitary condition.
   f. Description of the company's program for maintenance of the vehicles.
   g. Comprehensive list of on-board communication devices (e.g. radio frequencies and cellular phone numbers).
   h. Description of all posting locations, noting hours of operation, from which ambulance services will be offered.
   i. A list of all ambulance drivers and attendants which identifies each persons' EMT certification number and issuing county; CPR certifications, California Drivers License and Ambulance Drivers Certificate, with expiration dates of each.
   j. Description of the company's orientation program for attendants, dispatchers and drivers.

Approved:

Administration **EMS Medical Director**

k. Statement of legal history of all the persons identified in A.1.a above.

l. Evidence of insurance for general and professional liability, and worker's compensation in amounts as specified in the San Diego County Ambulance Ordinance.

m. An affirmation that the applicant possesses and maintains currently valid California Highway Patrol Inspection certificates for each vehicle listed in the application, and a copy of the license issued by the Commissioner of the California Highway Patrol.

n. A completed set of fingerprint cards for each of the persons identified in A.1.a above.

2. Agency and inspection fees shall be submitted to the Permit Officer/EMS Chief at the time of application.

3. Within thirty (30) days of receipt of an application, the Permit Officer/EMS Chief shall review all materials submitted and make a determination regarding the issuance of the applied for permit, pending required inspections.

B. Application Process, Not for Profit/Volunteer

1. Submit a completed application as identified in Section A.1 above.

2. Not for profit/volunteer agencies are exempted from the fee requirements identified in Section A.2 above.

C. Application Process, Governmental Agencies

Governmental agencies which operate an ambulance twenty-four (24) hours per day with full time paid employees are exempted from the application and fee requirements identified in this policy.

D. Application Process, Renewal, Privately Owned Companies and Not for Profit/Volunteer

1. Submit a completed application, which verifies the information identified in Section A.1 (a-n).

2. Submit appropriate, required fees.

3. Upon approval of the renewal application, the Permit Officer/EMS Chief shall schedule an inspection of all agency service units.

E. Denial/Revocation of Permit and Appeal Process

1. Any false or misleading statements made by the principals, in the application, reports or other documents filed with the Permit Officer/EMS Chief.

2. The applicant is not the legal owner or operator of the service.

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Administration **EMS Medical Director**

3. The applicant was previously the holder of a permit that has been suspended.
4. The applicant acted in the capacity of a permitted person or firm under this Division without having a valid permit.
5. The applicant pled guilty, or was found guilty of a felony or crime involving moral turpitude.
6. The applicant violated any provisions of this ordinance.

Appeal Process

a. The Permit Officer/EMS Chief shall notify the applicant in writing of the denial within 30 days of the receipt of the application.
b. The denial shall be written and sent to the last known address of the applicant, or hand delivered to the applicant, and shall set forth the reasons for the denial or revocation.
c. The applicant may request a hearing from the Permit Officer/EMS Chief by:
    1) The request will be in writing.
    2) The request must be filed with the Permit Officer/EMS Chief within ten (10) days of the hand delivery of the denial, or fifteen (15) days of mail delivery.
d. The Permit Officer/EMS Chief must schedule the hearing no later than twenty (20) days after the receipt of the request from the agency.
e. The decision of the Permit Officer/EMS Chief is final.

Approved:

Administration **EMS Medical Director**

SUBJECT: PERMIT APPEAL PROCESS **Date: 6/1/93**

I. Authority: San Diego County Code of regulatory Ordinances, Division 10 chapter 4.

II. Purpose: To establish the procedure for the resolution of appeals regarding either the denial of issuance of a permit, or the suspension/revocation of an existing Permit.

III. Procedure:

A. Denial of Issuance of Permit:

Whenever the Permit Officer denies an application for a Permit, the applicant may request a hearing on the denial.

1. All requests for a hearing shall be submitted in writing to the Permit Officer within ten (10) days of personal delivery of notice of denial of application. If the notice of denial is mailed, applicant has an additional five (5) days to file a hearing request.
2. A hearing shall be held not more than twenty (20) days from the date of receipt of the applicant's written request for a hearing.
3. The applicant shall have the burden of proof during the hearing.
4. The Permit Officer shall issue a decision on all appeals within two (2) working days of the hearing.
5. The applicant shall be notified in writing of the decision.
6. The applicant may appeal the denial after the hearing with the Permit Officer.

B. Suspension/Revocation of Permit:

Whenever he Permit Officer suspends or revokes a current permit, the permittee may request a hearing on the suspension or revocation.

1. All requests for an appeal hearing shall be submitted to the Clerk of the Board of Supervisors in writing within ten (10) days of notification of suspension of revocation.
2. The Clerk of the board of Supervisors shall assign the appeal to a Hearing Officer selected by the Clerk of the Board of Supervisors on a rotating basis from a list of qualified Hearing Office approved by the Board of Supervisors.
3. A Hearing Officer shall schedule a date for the hearing within ten (10) days after the date of assignment of the appeal by the Clerk of the Board of Supervisors.
4. The hearing shall be held no more then thirty (30) days from the time of assignment by the Clerk of the board of Supervisors to the Hearing Officer

Approved:

Gail F Cooper
Administration

M.L. McCann
Medical Director

5. The hearing Officer is authorized to issue subpoenas, to administer oaths and to conduct the hearing on the appeal.

6. The Permit Officer and the appellant may present evidence relevant to the denial, suspension, revocation, or other decision of the Permit Officer.

7. The Hearing Officer shall receive evidence and shall rule on the admissibility of evidence and on questions of law.

8. At the hearing any person may present evidence in opposition to, or in support of appellant's case.

9. The Hearing Officer shall issue a decision on all appeals at the close of the hearing.

10. The Hearing Officer shall within five (5) days of the announcement of a decision file with the clerk of the Board of Supervisors written findings of fact and conclusion of law and the decision.

11. The decision of the Hearing Officer is final when filed with the Clerk of the Board of Supervisors.

12. The effect of a decision to suspend or revoke a permit shall be stayed while an appeal to the Board of Supervisors is pending or until the time for filing such appeal has expired.

C. Exception to Hearing Procedure:

When in the opinion of the Permit Officer, there is a clear and immediate threat to the Safety and protection of the public; the Permit Officer may suspend a permit without a hearing.

1. The Permit Officer shall prepare a written notice of suspension.

2. The notice of suspension shall be either sent by certified mail or be personally delivered.

3. The Permittee may request a hearing from the Permit Officer within five (5) days of receipt of the notice.

4. The hearing shall be held not more than fifteen (15) days from the date of receipt of the request.

5. Following the hearing, the Permittee affected may appeal the decision in the manner indicated in Section III. B., (1-11) above.

6. The decision shall not be stayed during pendency of such hearing or appeal.

Approved:

Gail F Cooper

Administration

M.L. McCann MD

Medical Director

SUBJECT: GROUND AMBULANCE VEHICLE REQUIREMENTS **Date: 07/01/03**

I. Authority: California Vehicle Code, Section 2512(c); Health and Safety Code, Division 2.5, Section 1797.204.

II. Purpose: To define the minimum requirements for ambulance vehicles in San Diego County in the areas of vehicle design, safety equipment, and emergency equipment and supplies.

III. Policy: Every ambulance intended for operation in San Diego County shall meet the following minimum requirements:

A. All ambulances permitted for use in San Diego County shall conform to Federal Specification KKK-A-1822-C as promulgated by the U.S. General Services Administration with the following exceptions:

1. Critical Care Units and Specialty Vehicles may be exempt from Section 3.4.11 Vehicle Physical Dimension Requirements and Section 3.5 Vehicle Weight Ratings and Payload and Section 3.10.8 Doors, provided that it can be demonstrated to the Permit Officer that such exemption does not compromise safety.
2. Emergency Lighting. Ambulances permitted for use in San Diego County are exempted from Section 3.8.2.1 Emergency Lighting Configuration and Section 3.8.2.3 Switching Arrangements. They will, however, comply with minimum requirements of the California Vehicle Code (CVC) and Regulations promulgated by the State of California and administered by the California Highway Patrol (CHP).
3. Color, Paint and Finish. Ambulances permitted to operate in San Diego County are exempt from Section 3.16.2 Color, Paint and Finish and Section 3.16.2.1 Color Standards and Tolerances, provided, however, they must comply with California law.
4. Emblems and Markings. Ambulances permitted to operate in San Diego County are exempt from Section 3.16.4 Emblems and Markings, provided, however, they comply with California law and regulations.
5. Standard Equipment. Ambulances permitted to operate in San Diego County are exempt from Section 3.15.2 Standard Mandatory Miscellaneous Equipment, Section 3.15.3 Optional Equipment, and Section 3.15.4 Medical Surgical, and Biomedical Equipment, provided they comply with California regulation and local policy.

Approved:

Steven Jones

Administration

EMS Medical Director

6. Exemptions. The Permit Officer is authorized to grant additional exemptions from Federal KKK-A-1822-C specifications in the following situations:

   a. Declared disaster and disaster recovery periods.

   b. Ambulances in service prior to the effective date of this policy will be granted an exemption for the service life of the ambulance upon submission of documentation that the manufacturer of the ambulance carries at least $1,000,000 product liability insurance.

   c. Specialty Vehicles such as neonatal transfer units, multiple casualty units and special terrain vehicles may be exempted from specific Sections KKK-A-1822-C provided that the exemptions are shown to be in the interest of patient care and do not unnecessarily compromise safety. Such vehicles may not be placed in service until a permit is issued.

B. Required Documentation:

1. A current and valid San Diego County ambulance license (or facsimile) in the driver compartment.
2. A current and valid San Diego County ambulance license decal affixed to the lower portion right rear of the ambulance.
3. Proof of passage of the annual inspection performed by the CHP within the preceding twelve (12) months.
4. Vehicle registration and proof of insurance as required by law.

C. Emergency Care Equipment and Supplies: The following items shall be carried on all Ground ambulances as a minimum:

1. Essential equipment and supplies as required by the California Code of Regulations, Title 13, Section 1103.2(a) 1-19 (Attachment A).
2. Equipment necessary to comply with California Occupational Safety and Health Administration (CAL-OSHA) standards for exposure to blood borne pathogens.
3. Communication Items:

	Minimum
Agency Dispatch Device	1 each
Regional Communication System (RCS) 800 MHz programmed with appropriate EMS fleet map.	1 each

Approved:

Administration **EMS Medical Director**

SUBJECT: REQUIREMENTS FOR GROUND CRITICAL CARE TRANSPORT SERVICES **Date: 07/01/02**

I. Authority: Health and Safety Code, Sections 1797.220, 1797.222, 1798.172, San Diego County Code of Regulatory Ordinances, Division 10, Chapter 6.

II. Purpose: To identify minimum staffing and equipment requirements for ground critical care transport (CCT) services in San Diego County.

III. Definitions:

A. CCT Service Provider: any agency that routinely provides for hire the ambulance, personnel and/or equipment utilized to provide CCT services.

B. CCT Service: the provision of non 9-1-1 ambulance services utilizing personnel, equipment, medications that provide a higher level of care than that of an ambulance staffed by emergency medical technicians (EMT-Basic or EMT-Paramedic) alone.

C. Ground CCT vehicle – ground ambulance providing non 9-1-1 patient care and transport service that is staffed by a registered nurse or physician in addition to EMT-Basic's.

IV. Procedure:

A. Ground CCT ambulances shall comply with all requirements established for BLS ambulances.

B. Each CCT provider agency shall designate a medical director.

1. The medical director shall maintain a valid license as a physician in California.

2. The medical director shall be responsible for all medical protocols and procedures followed by the CCT provider agency's staff.

3. The medical director for the CCT service shall ensure that a comprehensive, written quality assurance (QA)/quality improvement (QI) program is in place to evaluate the medical/nursing care provided to all patients. This QA/QI program shall integrate with the countywide prehospital QA/QI program. Any incidents that result in a

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Approved:

Administrator **EMS Medical Director**

negative patient outcome shall be reported to the San Diego County EMS Medical Director within 10 working days.

4. The CCT provider agency medical director shall ensure that all nursing/ medical staff on a CCT collectively possess the skills and knowledge to provide a level of care commensurate with the specific and anticipated needs of the patient. The CCT provider agency medical director shall be accountable for all medical procedures performed on board the CCT by agency staff**.**

C. Staffing – CCT providers agencies shall adopt policies requiring the following:

1. All nursing/medical personnel shall maintain current appropriate licensure/certification.

2. In addition to the ambulance's driver, CCT provider agencies shall routinely staff all CCT vehicles with at least one (1) registered nurse or physician and a second certified or licensed patient care attendant. The requirement for the additional patient care attendant may be waived, on a case by case basis, by the sending physician per written physician order upon consideration of the patient's expected needs during transport.

3. The nurse shall meet the following qualifications:

   a. Possess a current California R.N. license.
   b. Demonstrate clinical competence in resuscitation skills appropriate for age of transported patients (e.g. ACLS, PALS, PEPP, ENPC, NRP).
   c. Possess two (2) years recent experience in critical care setting (ICU/CCU/ED/CCT).
   d. Complete a formal orientation program to the CCT provider agency's policies, equipment, medical protocols.

4. A CCT provider agency shall provide service that is available 24 hours a day/7 days a week.

5. Nothing in this policy is intended to limit a CCT provider agency from utilizing or maintaining additional staff on board the CCT.

Approved:

Administrator **EMS Medical Director**

D. Equipment/Medication

1. All CCT ambulances providing service shall carry, as a minimum, the equipment/medication items listed in S-836.

2. Agencies which provide pediatric and/or neonatal transport shall carry the pediatric inventory listed in S-836 (denoted by italics).

3. CCT providers shall ensure that transport personnel are thoroughly trained in the safe operation of all patient care equipment utilized on board the CCT.

4. Nothing in this policy is intended to limit a CCT provider agency from utilizing or maintaining additional equipment or medications on board the CCT, as long as patient care personnel are fully trained on the safe and effective use of that equipment or medication.

Approved:

Administrator **EMS Medical Director**

SUBJECT: CRITICAL CARE TRANSPORT UNIT INVENTORY **Date: 07/01/02**

I. Authority: Health and Safety Code, Division 2.5, Section 1797.220, 1797.222, 1798.172
San Diego County Code of Regulatory Ordinances, Division 10, Chapter 6

II. Purpose: Identify a minimum standardized inventory on all Basic Life Support and Critical Care Transport Units.

III. Policy: Essential equipment and supplies are required by California Code of Regulations, Title 13, Section 1103.2(a)1-20 and/or San Diego County Code of Regulatory Ordinances, Division 10, Chapter 8. Each Basic Life Support or Critical Care Transporting Unit in San Diego County shall carry as a minimum, the following as listed. Additional equipment, medications and supplies may be stocked as needed.

Basic Life Support Requirements:

	Minimum
Ambulance cot and collapsible stretcher	1 each
Straps to secure the patient to the cot or stretcher	1 set
Ankle and Wrist Restraints	1 set
Linens (Sheets, pillow, pillow case, blanket, towels)	2 sets
Oropharyngeal Airways	
Adult	2
Pediatric	2
Infant	1
Newborn	1
Pneumatic or rigid splints	4
Bag-valve-mask w/reservoir and clear resuscitation mask	
Adult	1
Pediatric	1
Infant	1
Oxygen Cylinder w/wall outlet (H or M)	1
Oxygen tubing	1
Oxygen Cylinder - portable (D or E)	2
Oxygen administration mask	
Adult	4
Pediatric	2
Infant	2
Nasal cannulas (clear plastic) Adult	4
Nasal airways (assorted sizes)	1 set
Nebulizer for use w/sterile H_2O or saline	2
Glucose Paste/Tablets	1 tube or 10 tablets
Bandaging supplies	
4" sterile bandage compresses	12
3x3 gauze pads	4
2", 3", 4" or 6" roller bandages	6
1", 2" or 3" adhesive tape rolls	2
Bandage shears	1
10"x 30" or larger universal dressing	2
Emesis basin (or disposable bags)	1
Covered waste container	1

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Administrator

MD
Medical Director

Portable suction equipment (30 L/min, 300 mmHg)	1
Suction device - fixed (30 L/min, 300 mmHg)	1
Suction Catheter - Tonsil tip	3
Suction Catheter (6, 8, 10, 12, 14, 18)	1 set
Head Immobilization device	2 each
Spinal Immobilization devices (1 min. 30", 1 min. 60") with straps**	1 each
Cervical collars - rigid	
Adult	3
Pediatric	2
Infant	2
Traction splint *	
Adult or equivalent	1
Pediatric or equivalent	1
Blood pressure manometer & cuff	
Adult	1
Pediatric	1
Infant	1
Obstetrical Supplies to include: gloves, umbilical tape or clamps, dressings, head coverings ID bands, towels, bulb syringe, clean plastic bags, sterile Scissors or scalpel	1 kit
Warm pack, or warming device (not to exceed 110' F)	1
Potable water (1 gallon) or Saline (2 liters)	1
Bedpan	1
Urinal	1
Disposable gloves - non-sterile	1 box
Disposable gloves – sterile	4 pairs
Cold packs	2
Sharps container (OSHA approved)	1
Agency Radio	1
EMS Radio	1

Optional Item:

Positive Pressure Breathing Valve, Maximum flow 40 Liters/min.	1

Critical Care Transport Requirements:

All supplies and equipment in Basic Life Support Requirements in addition to the following:

A. Airway Adjuncts:	Minimum
Aspiration based endotracheal tube placement verification devices	2
End Tidal CO_2 Detection Devices (*<15kg, ≥15kg)*	2 each
Esophageal Tracheal Airway Device (Combitube):Reg, Sml Adult**	2 each
ET Adapter	1 setup
Feeding Tube - 8 French	1
Mask - Bag-valve-mask Neonate size (Mandatory only for neonate CCT)	1 each

Approved:

Steven Jones — **Administrator**

MD — **Medical Director**

B. Vascular Access/Monitoring Equipment

Armboard: Long	1
Armboard: Short	1
Blood Glucose Monitoring Device**	1
Infusion pump & supplies	1
Intraosseous kit	1
IV Administration Sets: Macrodrip	6
Microdrip	3
IV Tourniquets	4
Needles: IV Cannula - 14 Gauge	3
IV Cannula - 16 Gauge	3
IV Cannula - 18 Gauge	3
IV Cannula - 20 Gauge	3
IV Cannula - 22 Gauge	3
IV Cannula - 24 Gauge	3
IM - 21 Gauge X 1"	3
S.C. 25 Gauge X 3/8"	3
Syringes: 1 ml, 3 ml, 10 ml, 20 ml	3 each

C. Monitoring

Conductive Defibrillator pads	2 pkgs
Defibrillator/ Scope Combination	1
Defibrillator Paddles *(4.5 cm,* 8.0 cm*)*	1 pair each
Electrodes	1 box
Electrode Wires	1 set
External pacing equipment and supplies	1 set
Oxygen Saturation Monitoring Device **	1
Adult probe	1
Infant/Pediatric probe	1

D. Packs

Drug Box	1
Personal Protective Equipment (masks, gloves, gowns, shields)	2 sets

E. Other Equipment

Broselow Tape	1
Thermometer - Oral, Rectal	1 each
Water Soluble Lubricant	1

Optional items:

Endotracheal Tubes: Sizes:	
2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5 (uncuffed)	1 each
6, 6.5, 7, 7.5, 8, 8.5, 9 (cuffed)	1 each
Laryngoscope - Handle	2
Laryngoscope - Blade: cu*rved and straight sizes 0-2*	1 each
curved and straight sizes 3-4	1 each

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Steven Jones

Administrator

MD

Medical Director

Magill Tonsil Forceps *small* and large		1 each
Stylet *6 and 14 French,* Adult		

F. Replaceable Medications:

Adenosine	6 mg/2 ml vial	6 vials
Albuterol	2.5 mg/3 ml or 0.083%	6 vials
ASA, chewable	80 mg	6
Atropine Sulfate	1 mg/10 ml	3
Atropine Sulfate	multidose 0.4 mg/ml	1
Atrovent	2.5 ml (1 unit dose vial) or 0.02%	2
Bacteriostatic water	30 ml	1
Calcium Chloride	1 GM/10 ml	1
Dextrose, 50%	25 GM/50 ml	2
Diphenhydramine HCL	50 mg/2 ml	2
Dopamine HCL	400 mg	1
Epinephrine	1:1,000 multidose vial	1
Epinephrine	1:1,000 (1 mg/1 ml vial)	3
Epinephrine	1:10,000 (1 mg/10 ml vial)	3
Furosemide	20 mg/40 mg/100 mg vial	100mg total
Glucagon	1 ml (1 unit)	1
Lidocaine HCL	100 mg/5 ml (2%)	3
Lidocaine	(1GM or 2GM)	1
Magnesium Sulphate	5 GM	5 G
Naloxone HCL (Narcan)	2 mg/1 ml	2 each
Nitroglycerin:	0.4 mg	1 container
Nitroglycerin topical preparation	2%	1 tube
Normal Saline for injection	10ml vial	1
Oxytocin (Pitocin)	10 units/1 ml	2
Procainamide	1 GM	1
Sodium Bicarbonate	*10 mEq*	1
Sodium Bicarbonate	50 mEq/50 ml	2
Solumedrol	125mg	1
Verapamil HCL	5 mg	2
Anticonvulsant (e. g. Valium, Versed or Ativan)	1	QS
IV Solutions:		
Normal Saline	1000 ml bag	2
Normal Saline	250 ml bag	2
D5W	250 ml bag	2

Note: ***Pediatric required supplies denoted by italics and are required inventory for units transporting pediatric and neonatal patients.***

** Unit may remain in service until item replaced or repaired.

* One splint may be used for both adult & pediatric e.g. Sager Splint

Approved:

Steven James — **Administrator**

MD — **Medical Director**

SUBJECT: NON-EMERGENCY MEDICAL TRANSPORT WHEEL CHAIR/GURNEY VAN PROVIDER'S PERMIT APPLICATION PROCESS **Date: 07/01/03**

I. Authority: San Diego County Code of Regulatory Ordinances, Division 10, Chapter 3.

II. Purpose: To establish the process by which agencies desiring to provide non-emergency medical transport wheel chair/gurney van services in San Diego County would obtain a Non-Emergency Medical Transport Service Provider's Permit.

III. Policy: Any agency desiring to provide non-emergency medical transport service in San Diego County shall obtain a San Diego County Non-Emergency Medical Transport Provider's Permit.

A. Agencies who presently operate non-emergency medical transport services which are currently permitted by the Metropolitan Transit Development Board (MTDB), North County Transit District (NCTD), or any other municipality and are in compliance with the requirements of these agencies will be issued a San Diego County Non-Emergency Medical Transport Provider's Permit without further investigation or fee upon submission of a copy of a current certificate of compliance.

B. Social service agencies who contract with any organization or entity that is permitted by entities defined in Section III A. shall be issued a San Diego County Non-Emergency Transport Provider's Permit without further investigation or fee.

IV. Procedure:

Application Process, Non-Exempted Agencies By Endorsement of the MTDB Permit

A. Submit a completed application which contains the following information:

1. Copy of completed and approved MTDB paratransit application.
2. Copy of approved MTDB vehicle inspection reports and vehicle medallion numbers.
3. Names and addresses of the applicant, registered owner(s), partner(s), officer(s), director(s) and all shareholders who control 10% or more of the stock of the applicant.
4. Name under which the applicant has, does or proposes to engage in non-emergency medical transport service.
5. A resume specifying the education, training and experience of the applicant in the business of providing transportation services.

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Administration

EMS Medical Director

6. A description of each gurney van and/or wheelchair van including the make, model, year of manufacture, vehicle identification number, the current odometer reading of the vehicle and the color scheme, insignia, name, monogram or other distinguishing characteristics of the vehicle.
7. A description of the company's program for maintenance of the vehicles.
8. Proof of ability to staff each vehicle with person(s) possessing at least a current American Red Cross Standard First Aid Certification, or equivalent.
9. A Certificate of Consent to Self Insure issue by the California State Director of Industrial Relations, or a Certificate of Worker's Compensation Insurance as required.
10. Proof of liability insurance as required.
11. A statement of the legal history of the applicant, registered owner(s), partner(s), officer(s), director(s) and controlling shareholder, including criminal convictions and civil judgments.

B. Permit by direct application to the County.

1. Completed County non-emergency vehicle permit application.
2. Applicant’s name and business address.
3. (Refer to Section A. #3 through 10 above.)

C. Submit appropriate required fee to the Permit Officer at the time of application.

D. Within thirty (30) days of receipt of an application, the Permit Officer will:

1. Make a determination regarding the issuance of the applied for permit.
2. Once application is accepted, schedule inspection and permitting of all service units.

Approved:

Administration

EMS Medical Director

SUBJECT: NON-EMERGENCY MEDICAL TRANSPORT WHEEL CHAIR/GURNEY VAN SERVICE REQUIREMENTS **Date: 07/01/03**

I. Authority: San Diego County Code of Regulatory Ordinances, Division 10, and Section 610.702.

II. Purpose: To define the minimum requirements for non-emergency medical transport wheel chair/gurney van service in San Diego County in the areas of vehicle design, safety equipment and supplies.

III. Policy: Every non-emergency medical transport service vehicle intended for operation by an approved provider in San Diego County shall meet the following minimum requirements:

A. All non-emergency medical transport service vehicles, shall at all times:

1. Comply with all applicable federal, state, and local licensing requirements.
2. Be configured, licensed, and maintained pursuant to all federal and state laws, and local policies.
3. Have an exterior color scheme and company name/logo sufficiently distinctive so as to not cause confusion with vehicles from other agencies or medical transport services, as determined by the Permit Officer.

B. Required documentation:

1. A current and valid San Diego County Non-Emergency Medical Transportation Service license decal affixed to the lower portion right rear of the vehicle.
2. Proof of passage of the mechanical inspection performed by the County specified contracted provider within the preceding six (6) months. Agencies currently permitted by regulatory entities identified in the San Diego County Code of Regulatory Ordinances, Division 10, Chapter 3, Section 610.301 (a.b.c.) shall present proof of passage of a mechanical inspection within the preceding twelve (12) months.
3. Prove and maintain in full force and effect liability insurance including, but not limited to, comprehensive auto liability, each with a combined single limit of not less that $1,000,000 per occurrence, and general liability with a limit of not less that $1,000,000 per claim.
4. Proof of Workers Compensation or a Certificate of Consent to Self-Insure issued by the California State Director of Industrial Relations, applicable to all employees. The Permittee must maintain in full force and effect such coverage during the term of the Permit.

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Administration **EMS Medical Director**

C. Personnel Standards:

1. Each driver shall possess at least a current American Red Cross Standard First Aid Certification or equivalent.
2. Each driver shall be at least eighteen (18) years old and possess a valid California Driver's License, designated class III/C or higher.
3. No person shall act in the capacity of a non-emergency medical transportation driver or Attendant if such person is required by law to register as a sex offender or has been convicted of any criminal offense involving force, duress, threat, or intimidation within the last five (5) years.
4. All drivers shall wear clean uniforms that identify the employer or sponsoring agency, and have visible identification of name.
5. Each driver shall wear, in a manner clearly visible on their person a driver identification card issued by the Metropolitan Transit Development Board (MTDB).

D. Required Equipment and Supplies:

The following items shall be carried on all non-emergency transport service vehicles as a minimum:

1. A fire extinguisher of the dry chemical or carbon dioxide type with an aggregate rating of at least five (5) B/C units and a current inspection card affixed to it.
2. A minimum of at least three (3) red emergency reflectors.
3. A first-aid kit containing medical items to adequately attend to minor medical problems.
4. A map of the County of San Diego published within the past two (2) years, which shall be displayed to any passenger upon request.
5. Each vehicle shall be equipped with a rear view mirror affixed to the right side of the vehicle, as an addition to those rear view mirrors otherwise required by the California Vehicle Code.
6. Each vehicle shall be equipped with a rear view mirror affixed in such a way as to allow the driver to view the passengers in the passenger compartment.

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7. Each vehicle identified in #6 above shall have at least one (1) oxygen tank floor mount-securely mounted, for each oxygen cylinder present on the vehicle.
8. Each vehicle shall have a vehicle body number visible on the left front, right front and rear portion of the vehicle.
9. Each vehicle shall have an operational 2-way agency communication device.
10. Each vehicle shall carry wheel chair seat belts for each wheel chair position in the vehicle.
11. Each vehicle shall have the appropriate number of approved wheel chair restraint mechanisms.
12. Each vehicle shall have floor mounts for the wheel chair tie downs – securely mounted.
13. Each vehicle shall have seat belts for all seats used by ambulatory clients.
14. Each vehicle shall have a minimum of one (1) blanket on board.
15. Each vehicle shall carry all equipment necessary to comply with California Occupational Safety and Health Administration (CAL OSHA) standards for exposure to blood borne and air borne pathogens.
16. Each vehicle shall carry one (1) extra wheel chair.

Approved:

Administration **EMS Medical Director**

SUBJECT: BASIC LIFE SUPPORT AMBULANCE SERVICE PROVIDER REQUIREMENTS **Date: 07/01/04**

I. **Authority:** Health and Safety Code 1797.160, 1797.204 and 1797.220, 1797.214 California Vehicle Code, Article 2, Section 2512(c) San Diego County Code of Regulatory Ordinances, Division 10.

II. **Purpose:** To assure minimum requirements for basic life support (BLS) ambulance services operating in San Diego County.

III. **Policy:** To be eligible to provide BLS ambulance service in San Diego County, an agency (public or private) shall:

1. Maintain appropriate licensure as required by the California Highway Patrol.
2. Maintain appropriate permit as required by the San Diego County Code of Regulatory Ordinances, Division 10, Chap. 2.
3. Staff each transporting unit responding to call for service with a minimum of two (2) Emergency Medical Technician-1's (EMT-1) currently certified in the State of California.
4. Be in accordance with the San Diego County Emergency Medical Service (EMS) policies and procedures.
5. Cooperate with the EMT training agencies in providing field experiences.
6. Establish internal quality assurance mechanisms based on policies/procedures as cited by the San Diego County Division of EMS, including participation in Countywide monitoring activities (see policy S-004).
7. Submit completed prehospital reports in accordance with policy S-602.
8. Meet all requirements as identified in California Code of Regulations, Article I, Section 1100.3, California Vehicle Code, Article 2, Section 2512 (b), (c) and (d), and San Diego County Code of Regulatory Ordinances, Division 10, Chapter 6.

Approved:

Steven Jones

Administration

Medical Director

SUBJECT: PREHOSPITAL EMS AIRCRAFT CLASSIFICATION **Date: 07/01/04**

I. Authority: Health and Safety Code Sections 1797.201 and 1797.206.

II. Purpose: To establish criteria for classification of prehospital EMS aircraft service providers operating within the emergency medical services (EMS) system of the County of San Diego.

III. Policy: All prehospital EMS aircraft operating within San Diego County shall be classified by the Division of EMS prior to operation. Reclassification shall occur if there is a transfer of ownership or a change in the aircraft's category. Classifications shall be as follows:

1. Air ambulance - any aircraft specially constructed, modified or equipped, and used for primary purpose of responding to emergency medical calls. Staffed with a minimum of two (2) attendants certified to provide advanced life support (ALS).
2. Rescue aircraft - any aircraft not primarily used for emergency medical transports but which may be used for that purpose when air or ground ambulance is inappropriate or unavailable.
   A. ALS rescue aircraft - a rescue aircraft whose medical flight crew has at a minimum one (1) attendant certified to provide ALS.
   B. BLS rescue aircraft - a rescue aircraft whose medical flight crew has at a minimum one (1) attendant certified as an EMT-B.
   C. Auxiliary Rescue Aircraft – a rescue aircraft which does not have a medical flight crew.

Approved:

Administration **Medical Director**

SUBJECT: AIR AMBULANCE DISPATCH CENTER DESIGNATION/DISPATCH OF AIR AMBULANCE

I. Authority: Health and Safety Code, Sections 1797.204, 1797.206, and 1797.218.

II. Purpose: To provide for the coordination of EMS aircraft response within San Diego County.

III. Definitions:

Air Ambulance: any rotor aircraft specially constructed, modified or equipped, and used for the primary purposes of responding to emergency calls and transporting critically ill or injured patients whose ambulance flight crew has at a minimum of two (2) attendants certified or licensed in advanced life support, one of whom is an RN.

Alert - condition wherein a requesting agency has requested that an air ambulance be placed on standby in anticipation of a response.

Estimated Time of Arrival (ETA) - the estimated sum of scramble, pre-flight, launch, and in-flight response time to a scene.

Launch - condition wherein a requesting agency has requested that an air ambulance respond to an incident.

Responding - condition wherein the air ambulance flight crew is leaving quarters, preparing the helicopter for flight and flying to the incident scene.

Response Time - the actual sum of scramble, preflight, launch, and in-flight response time to a scene.

IV. Policy: All EMS air ambulance service providers operating within San Diego County shall be dispatched by a center designated by the Division of EMS. The County of San Diego, Division of EMS shall select a provider using the customary procurement process.

A. To be designated as an air ambulance dispatch center, the dispatch agency shall:

1. Be staffed 24 hours a day, 7 days a week.
2. Possess radio capabilities allowing for constant communication with aircraft.
3. Maintain a toll free dedicated telephone line to allow access by all requesting agencies.

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4. Answer the phone " Air Ambulance Service".

5. Provide, upon request, tapes needed for quality assurance purposes, within thirty (30) days of incident.

6. Possess communication capabilities with all receiving hospitals.

7. Maintain a flight log to include, at a minimum:

   a. time of request

   b. requesting agency

   c. location of incident

   d. time dispatched

   e. crew on board

   f. time of lift off

   g. time arrived on scene

   h. time of lift off from scene

   i. time arrived at receiving hospital

   j. reason for aborted flight.

8. Comply with the Division of Emergency Medical Services in the quality assurance process.

B. The County of San Diego may revoke or suspend authorization of an EMS aircraft designated dispatch center for failure to comply with applicable policies, procedures, protocols and regulations.

V. Procedure:

A. Dispatch centers requesting air ambulance dispatch designation must submit a written request to the County of San Diego, Division of EMS with the following minimum information:

1. Communication capabilities with all hospitals, all public safety agencies, BLS and ALS ground units, and air ambulance units.

2. Documentation of compliance with applicable Federal and State Air Regulations.

B. County of San Diego, Division of EMS may revoke/suspend designation of dispatch center for failure to comply with applicable policies, procedures, protocols and regulations.

VI. Responsibilities of Agency:

A. The designated air ambulance dispatch agency provides the following services:

1. Establishes the identity of the caller, confirms the location of the incident, the contact person's name, ground contact, radio frequency and other pertinent information.
2. Determines the closest most appropriate available air ambulance.
3. Informs the requesting agency of the ETA of the air ambulance.
4. Requests launch or standby as appropriate from the closest most appropriate provider.
5. Maintains an updated list of all landing pads in the county.
6. Maintains a system status plan approved by the Division of EMS and adheres to the dispatch procedure established in Section V of this policy.
7. Provides the Division of EMS and participating air ambulance providers with system reports for each month.
8. These system reports shall illustrate the dispatch times, response times and other patient service times captured by the air ambulance dispatch center.

VII. Dispatch Procedure:

A. Air ambulance services request:

1. Requesting agencies contact the air ambulance dispatch center on the designated phone line to request an air ambulance launch or standby providing incident address, Thomas Bros. map page, or GPS coordinates and nature of incident, landing zone, ground contact unit, and coordination radio frequency.

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Administration **Medical Director**

2. The air ambulance dispatch center selects the closest most appropriate unit and advises the requesting agency of the air ambulance agency, unit number, response location and pertinent hospital receiving information.
3. The air ambulance dispatch center provides information to the selected air ambulance provider and obtains an ETA.
4. The air ambulance dispatch center tracks helicopter status as (ALERTED) when a standby is requested and (RESPONDING) when a launch is initiated.
5. The air ambulance dispatch center tracks disposition of the response as (CANCELLED) or (TRANSPORT) as advised by the air ambulance provider at the close of each response.

B. Air ambulance unit selection for responses:

1. The air ambulance provider contacts the air ambulance dispatch center with each " on and off duty" status of helicopter units, providing unit numbers, hours and location.
2. The air ambulance provider contacts the designated air ambulance dispatch provider with units "out of service" status or post-to-post moves within the County for various reasons including fueling, maintenance, special events, etc.
3. The air ambulance dispatch center selects the closest, most appropriate air ambulance provider based on proximity to the incident. In the instance where multiple providers are at the same post, the air ambulance provider not having handled the last response will be selected.

C. Other communications:

1. Pre-launch communication "requests for service" will be made to the air ambulance dispatch center, which then turns the request over to the dispatch center of the selected provider.

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Administration **Medical Director**

2. Post-launch communications pertaining to a response in progress should be made directly between the responding air ambulance agency and the requesting agency.

D. Posting locations:

1. Air ambulance provider will contact the air ambulance dispatch center with each "on and off duty" status of helicopter units, providing unit numbers, hours and location.

2. "Move up" locations may also be used at the discretion of the provider for periods of six hours or less provided that they are at a licensed helipad or airport and that appropriate indoor rests and toilet facilities are provided for flight crews. Itinerant units will not be allowed.

E. Disputes:

1. Selection made by the air ambulance dispatch center at the time of service shall be final.

2. Air ambulance providers who believe that a dispatch error has occurred shall present their complaints in writing to the Division of EMS Ambulance Permit Officer or designee, within two weeks of the incident.

3. The Ambulance Permit Officer or designee shall investigate disputed calls within two weeks of receipt and may at his/her discretion compensate an appealing air ambulance provider agency with an "extra turn or turns" in rotation. No other compensation shall be made and the decision of the Permit Officer is final.

VIII. Fees:

A. Dispatch Fee:

1. A dispatch fee shall be assessed for each dispatch resulting in a transport. Air ambulance providers shall be billed monthly. The amount of the dispatch fee shall be determined by the Board of Supervisors and shall reasonably cover the cost of providing the dispatch service.

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Administration **Medical Director**

2. Fees shall be due and payable to "Division of EMS" or its designee 30 days after the date of invoice.
3. Failure to remit fees within the 30 day period shall result in immediate suspension from the air ambulance dispatch program until fees have been paid.
4. Failure to remit fees within 60 days after the date of the invoice shall result in permanent termination from the air ambulance dispatch program.

Approved:

Administration **Medical Director**

SUBJECT: AIR AMBULANCE SERVICE PROVIDER AUTHORIZATION **Date: 07/01/04**

I. Authority: Health and Safety Code, Sections 1797.204, 1797.206 and 1797.218.

II. Purpose: To define the process for authorization of air ambulance service provider agencies operation by Division of Emergency Medical Services (EMS) within San Diego County.

III. Policy: All air ambulance service provider agencies operating within the San Diego County EMS system shall be authorized by the Division of Emergency Medical Services prior to operation.

A. To be authorized to provide EMS air ambulance support the provider shall:

1. Provide services on a continuous twenty-four (24) hour basis, and
2. Maintain medical flight crews as provided for by each aircraft classification, and
3. Function under local medical control, and
4. Comply with the Division of Emergency Medical Services quality assurance process to include representative participation on the Prehospital Audit Committee, and
5. Submit prehospital reports as per County of San Diego Division of EMS Policy S-602, and
6. Participate in community education programs and first responder orientation when requested, and
7. Submit to the Division of EMS evidence of compliance with California Code of Regulations, Title 22, Division 9, Chapter 8, Section 100302 (Medical Flight Crew Personnel Training) and 100306 (Space and Equipment), and
8. Enter into a written agreement with the County as an air ambulance service provider, and
9. Submit to the Division of EMS verification of dispatch capability, 24 hours a day, 7 days a week, capable of maintaining constant communication with the aircraft, and
10. Comply with all applicable Federal and State Air Regulations.

B. The County of San Diego may revoke or suspend authorization of an air ambulance provider for failure to comply with applicable policies, procedures, protocols and regulations.

Approved:

Administration **Medical Director**

IV. Procedures:

A. Agencies requesting authorization must submit a written request to the County of San Diego, Division of EMS to include, but not be limited to:

1. Number and type of aircraft to be authorized.
2. Patient capacity of each aircraft.
3. Level of patient care to be provided by each aircraft.
4. Proposed staffing for each aircraft.
5. Statement of demonstration need.

B. Once authorized; the provider agency shall notify the local EMS Agency of

1. Any foreseen or unforeseen change in or disruption of service (i.e., decrease in number of aircraft available, staffing patterns or patient care capabilities).
2. Documentation of satisfactory compliance with personnel requirements, equipment and supplies.

Approved:

Administration **Medical Director**